



Hunt Institute for Botanical Documentation
5th Floor, Hunt Library
Carnegie Mellon University
4909 Frew Street
Pittsburgh, PA 15213-3890
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org

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Saxifragaceae Dumort.

Key to the Genera.

Flowers solitary, staminodia present.

Parnassia.

Flowers ~~usually clustered~~, rarely solitary, staminodia
none.

Petals wanting.

Chrysosplenium

Petals present.

Petals pinnatifid or lacinate.

Flowers comparatively large; capsule
beaked.

Tellima.

Flowers small; capsule not beaked.

Mitella.

Petals entire or nearly so.

Leaves coriaceous; carpels distinct
or nearly so.

Leptanthera.

Leaves not coriaceous; carpels
united at least at base.

Petals filicamentous.

Tiarella.

Petals not filicamentous.

Ovary 4-celled; placentae
parietal.

Geuchura.

Ovary commonly 2-celled,
rarely 3- or even 5-celled.

Stamens 10.

Saxifraga.

Stamens 5.

Therofum.

Glabrous, Parmassia L.

^{terminal} ~~terminal~~ hurls from a short, thick root stock; leaves mostly basal; ^{white} scapes simple, ~~flowered~~; calyx 5-lobed nearly to the base, ~~for~~ fertile stamens 5, alternate with the petals, stam-
inodia ~~usually numerous~~, in clusters at the base of each petal; ovary 1-celled, stigmas 4, sessile or nearly so. About 12 species in the colder parts of the northern hemisphere, especially in the mountains.

Key to the Species.

Petals conspicuously fringed near the base.
P. fimbriata.

Petals not fringed.

Petals much exceeding the sepals; bract borne considerably above the base of the scape.
P. polustriis.

Petals shorter than or but slightly exceeding the sepals; bract ^{erect} ~~erect~~ ^{pendant} ~~pendant~~ ^{usually} near the base of the scape.
P. kotzebuei.

Parnassia fimbriata König,
Parnassia fimbriata König, König & Sims Ann. Bot.
1: 391, 1805.

Basal leaves broadly reniform,
 cauline leaf reniform to ovate, near the
 middle of the scape; ~~flowers~~ scapes 15 to
 30 cm. high; flowers in dried specimens
 15 to 25 mm. broad. Moist ~~low ground~~
 places from Disenchantment Bay to the
 southern boundary and reported to extend
 to Colorado and California. Originally
 described from "the north-west coast of
 America."

Gakutat Bay. - Disenchantment Bay,
 Funston, 1892 (No. 88).

Southeastern Alaska. - Near Juneau,
 Grace E. Cooley, Aug. 6, 1891, Canville & Kearney
 (No. 2498). Shark Bay, Looman, 1895 (No. 138),
 Belm Bay, Cleland Peninsula, J. B. Flitt, 1901
 (No. 1944).

Parnassia palustris L.*Parnassia palustris* L. ~~Sp. Pl.~~ Sp. Pl. in 273. 1753.

Leaves mostly ovate, rarely nearly uniform; scapes 6 to 40 cm. high; flowers 13 to 25 mm. broad in dried specimens, the petals ovate, oval or subovate. Throughout Alaska and southward to Wyoming, southward to Minnesota and Quebec. Widely distributed in Europe where it was originally described, and in Siberia.

Arctic Alaska. - Kowak River, W.L. Buff, Aug. 25. 1885.

Seward Peninsula. - ^{Vicinity of} Port Clarence, J. L. White, Sept. 9, 1894, L. A. Walpole, 1901 (Nos. 1697, 1995).

Bristol Bay and vicinity. - Lake Alekmagik, C. L. Mc. Kay, Aug. 5, 1881. Mushagak, Johnson Aug. 12, 1882.

Alutian Chain. - Attu Island, J. M. Macoun, Aug. 29, 1891. Popsay Island, Kirkaid, July 8 to 19, 1899. Unga Island, L. A. Golder, ~~1900~~ 1900 (No. 71). Nagai Island, Harrington, 1871-72.

6 4

Lodiak Island and vicinity. - Kellogg, 1867 (No. 226), T. H. Bean, 1889, L. A. Walpole, 1900 (No. 1204), J. K. Löffler, 1899 (No. 26), Evans, 1897 (No. 361), Conille & Kearney (No. 234). Long Island, Conille & Kearney (No. 239).

Lake Iliamna region. - East of Lake Clark, Garman, 1902 (No. 173).

Cook Inlet. - Kasilof, Evans, 1898 (No. 738), Kinai, H. P. Mulsen, 1901 (No. 65).

Koyukuk River region. - Alutna River, L.C. Schrader, Aug. 23, 1899.

Yukon River. - Between Nulato and New-
ikakat, I.C. Russell, July 23-27, 1889. Istanilla
Mountain, A. J. Collier, 1902 (No. 131).

Rampart to Cook Inlet. - Rampart, Isaac
Jones, 1901 (No. 71). Tanana, A. J. Collier, 1902
(No. 116). Kuskokwim River, Brooks and Prindle,
1902 (No. July 19, 1902).

Head waters of the Copper and Tanana Rivers. -
~~Stabo~~ Nabesna River, Schrader & Hartman, 1902
(Nos. ⁶³ 72).

Upper Yukon. - Near Fort Yukon, I.C.
Russell, July 20-Aug 2, 1889. Forty Mile River,
A. L. Boston, Aug. 3, 1899. Ahane & Selkirk, Tarleton,
1899 (No. 105). Mill Flat, Garman, 1899 (No. 1093).

Parnassia katzebuei Cham. ~~Schlecht~~
; Sprng. Syst. 1, 195, 1823.
Parnassia katzebuei Cham. ~~Schlecht, Linnaea~~
11549, 1826.

Leaves ovate as in the preceding but mostly smaller; scapes 4 to 20 or sometimes even 30 cm. high; flowers 10 to 15 mm. broad in dried specimens, the petals oblong to narrowly ovate or oval. Usually on steep slopes and cliffs from Seward Peninsula to the Aleutians and Glacier Bay and in the interior to the upper Yukon, across the continent to Labrador and Quebec, south to the Rocky Mountains in British Columbia America. Also in eastern Siberia, type locality, Eschscholtz Bay.

Islands of Bering Sea. - ~~St. Lawrence~~ ^{Mathew} Island, Canille & Kearney (No. 2140).

Seward Peninsula. - Fort Clarence, Canille & Kearney (No. 1888), F. A. Walpole, 1901 (Nos. 1578, 1736, 1826). Near Nome City, J. B. Little, 1900 (No. 1603).

Koyukuk River region. - Alakna River, W. C. Mendenhall, July 23, 1901.

Alutian Chain. - Attu Island, L. M. Turner,
1880 (No. 1231), Unalaska, Evermann, 1892 (No.
183), C. H. Merriam, Aug. 12, 1891, Amaknak
Island, Evermann, 1892 (No. 177), Pofof Island,
Saunders, July 26-18, 1899, Kinkaid, July 8, 1899.

Alaska Peninsula. - Herenden Bay, H. C.
Fassett, July 1890, Kukak Bay, Condit & Kearney
(No. 1548).

Gakutat Bay. - Hidden Glacier, Russell Ford,
Condit & Kearney (No. 978), Blighni Point,
Condit & Kearney (No. 1136).

Upper Yukon. - Coal Creek Hill, Lunston,
1893 (No. 85). Near Selwyn River, Tarleton,
1899 (No. 1396). Ft. Selkirk, Tarleton, 1899 (No.
1392).

Lake Iliamna Region. - Lake Iliamna,
Gorman, 1902 (No. 138).

Chrysosplenium L.

Low, somewhat succulent, semi-aquatic herbs with weak ~~stems~~ and crenate leaves; flowers small, calyx adnate to the ovary 4-5 ~~lobed~~ lobed, stamens 4 4 to 10; ovary 1-celled styles 2 short. About 13 species in the ~~south temperate zone and~~ cooler parts of the northern hemisphere and in South America.

Key to the Species.

Leaves thin, lax; stamens 4.

C. tetrandrum.

Leaves thickish firm; stamens 8.

C. beringianum

Chrysosplenium tetrandrum L'vov.

Chrysosplenium tetrandrum L'vov, Bot. Notes
193. 1858,

Stems

Rootstock slender, stems 2 to 15 cm, high; leaves ~~crenately~~ ^{crenate} 3 to 5 lobed or even 7 ~~lobed~~, the lobes short, rounded or sometimes ~~and are again~~ slightly emarginate; sepals usually greenish yellow; seeds small, numerous. Common in ~~rainy~~

places and wet sandy or gravelly soil along brooks, particularly in the shade. Ranges in Alaska from Cape Sabine to Cook Inlet and throughout the Aleutian Islands, and has been collected in the upper Yukon, Alaska, and on the Asiatic side of Bering Strait, Spitzbergen, in the Old World. Originally described from.

Doubtless all the C. aluticifolium L. reported from this Alaska should be referred to this species. I have seen ^{specimens of} no Chrysosplenium from Alaska having eight stamens excepting C. heringianum Rost.

Islands of Bering Sea. — St. Matthew Island,

Conille & Kearney (No. 2166).

Seward Peninsula. — Fort Clarence, Conille & Kearney (No. 1884), F. A. Walpole ~~the~~ 1901 (Nos. 1574, 1604, 1737, 1961). 16 Miles west of Nome City, ~~H. B.~~ Flett, 1900 (No. 1605).

Korton Sound. — Ft. St. Michaels, Bannister, 1865-66.

Bristol Bay. — Unalakleet, E. L. McKay, 1881.

Lake-Iliamna Region. — Iliamna Bay, Garman, 1912 (No. 20).

Aleutian Chain. — Papey Island, Kirkaid, July 8 to 19, 1899.

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Alaska Peninsula - Kukak Bay,
Coville & Kearney (No. 1591).

Cook Inlet - Halibut Cove, Coville &
Kearney (No. 2425).

Upper Yukon - Klondike below Bon-
anga, Williams, June 18, 1899. White Horse
Rapids, Fortson, 1899 (No. 22).

Chrysosplenium beringianum Rose.
Chrysosplenium beringianum Rose, Bot. Gaz. 23:
245, 5, 3, 1897.

Rootstock thick, stems 3 to 10 cm. high,
leafless except ^{near} ~~for~~ ^{to} ~~the~~ subtending the in-
florescence, or sometimes with a single
leaf about midway of the stem; basal
leaves ~~with~~ glabrous or hairy above,
slender-petioled, the petioles ciliate on the
margins at least below, with brownish
hairs; sepals usually purplish; seeds ~~few~~
few, about 1.5 mm. wide, more than twice
as large as in the preceding. Moist places
on the tundra from Hall ^{Island} the Pribilofs and
Aleutian islands and the Alaskan Peninsula.
Type locality, St. Paul Island.

Islands of Bering Sea - Hall Island,
Conville & Leaveney (No. 2011).

Pribilof Islands - St. Paul Island, C. H.
Merriam, July - Aug. 1891, J. M. Macanin, July
6, 1892, Aug. 9, 1896, Lane & Prentiss, 1898 (No. 66).

Alutian Chain - Adak Island, C. H. Town-
send, Aug. ~~27~~ 31, 1893. Pofkof Island Kirkaid,
July 8 to 19, 1899.

Alaska Peninsula - Stepanov Bay, Palache,
July 8 to 19, 1899.

Tellima R. Br.

P

Perennial herbs; ^{with leaves} ~~with~~ roundish-cordate, ~~leaves~~ leaves and ~~rather large~~ spike-like inflorescence; petals lacinate, stamens 5 or ^{included} 10; ovary beaked, styles 2, stigmas capitate, ~~obovate 3-lobed~~ & about 2 species, natives of northwestern North America.

Tellima grandiflora (Pursh) Dugl.
Mitella grandiflora Pursh Fl. 1: 314, 1814.
Tellima grandiflora Dugl.; Lindl. Bot. Reg. 14:
 5. 1178, 1828.

Hirsute, 60 to 90 cm. high; leaves with rounded, ^{-dentate} crenate lobes, the basal ones long-petioled, cauline short-petioled or sessile; flowers ~~rather large~~ greenish-yellow, stamens 10. Moist rocks and shaded banks of brooks from Alaska Peninsula to the southern boundary, ~~thence~~ and to California. Originally described from "the north-west coast."

Alaska Peninsula. - Berendsen Bay, C.F.
Lawson, July, 1890. Kukak Bay, Coville &
Kearney (No. 165-8).

Yakutat Bay. - Near Egg Island, Disen-
chantment Bay, Coville & Kearney (No. 1114).
Disenchantment Bay, Furston, 1892 (No. 83).

South eastern Alaska. - Juneau, Grace &
Coolidge, July 24, 1891, Coville & Kearney (No.
25-15). Sitka, Bischoff, 1865-66. Hawken,
Evans, 1897 (No. 112). Ys Bay, Gorman, 1895
(No. 25).

Reported from
South eastern Alaska and ranges from
to Montana, Labrador ^{and} Pennsylvania, ~~and~~
Originally described from northern Asia where
it ranges from Dauria to the Lena River
and the Pacific coast.

16 f.

Yukon Territory. - Vicinity of Summit
and Middle lakes, A.L. Balton, 1898.

Mitella pentandra Hook.

Mitella pentandra Hook. Bot. Mag. 56: 5. 2983.
1829.

Leaves mostly ovate, ^{sometimes nearly auriform,} ~~absolutely lobed and~~ ~~glabrous or very~~
sparingly pubescent ~~above~~ ^{mostly ovate}
crenate-serrate very sparingly pubescent
usually doubly crenate; scapes 12 to 25
cm. high; flowers with pinatifid petals.

Southeastern Alaska and southward to
Oregon and the Rocky Mountains. Type,
"raised in the Botanic Gardens both of
Edinburgh and Glasgow, from seeds brought
from the Rocky Mountains of North
America, by Mr. Drummond."

South eastern Alaska. - Junction above
Silver Bow Basin, Grace C. Cooley, Aug. 6, 1891,
Lawson, Evans, 1897 (No. 108?). Prince of
Wales Island, J. B. Little, 1901 (No. 1942).

Leptarrhena R. Br.

Perennial ^{herb}, leaves mostly basal, ~~erect~~ persistent, petioles sheathing at the base as the cauline leaves sessile; flowers ~~racemose~~ ~~paniculate~~, calyx tube ~~at~~ crowded at the summit of the scape or racemose-paniculate, the pedicels elongated in fruit; stamens 10; ovary of 2 carpels; seeds numerous. 18 species ranging from ~~Hant~~ Kamchatka through the Aleutian Islands to North America and thence south in the mountains to lat. 49°.

Leptarrhena amplexifolia (Sturb.) Ser.

Saxifraga amplexifolia Sturb. Rv. Saxif. Suppl.

Leptarrhena ^{Willd. Sp. 5.2.} *pyrolifolia* R. Br. Chlor. Melb. 15.

1824.

Leptarrhena amplexifolia Ser. in DC. Prodr.

4: 48, 1830.

Stems 7 to 45 cm. high; leaves serrate, basal ~~to~~ ones mostly obovate, cauline oval, oblong as the uppermost ~~narrowly~~ ovate, clasping. ^{Especially in moist places} Caniferous forests and grassy hillsides, from the Aleutian Islands to the south eastern boundary. Type locality.

(*Saxifraga pyrolifolia* D. Don, Trans. Linn. Soc. 13: 389, 1822.)

18 ft.
Saxifraga pyrolifolia was described from
Kamchatka and Unalaska.

Alutian Chain. — Atka Island, L. M. Turner,
July 3, 1879. Unalaska, Euermann, 1892 (No. 57),
Coville & Kearney (No. 1733), Evans, 1877 (No. 528),
J. B. Flett, 1900 (No. 1787), C. H. Merriam, Aug. 12, 1891,
Kellogg, 1867 (No. 291), J. C. Russell, June 29, 1889,
Applegate, Amaknak Island, Euermann, 1892
(No. 178). Unga Island, Harrington, 1871-72.

Alaska Peninsula. — Port Moller, H. C. Tanslett,
July, 1890. St. Lawrence Bay, Palache, July 8 & 19, 1899.

Prince William Sound. — Port Wells, Coville
& Kearney (No. 1262).

Yakutat Bay. — ^(Near) Egg Island, Disenchantment
Bay, Coville & Kearney (No. 1115).

Sautheastern Alaska. — Point Gustavus,
Glacier Bay, Coville & Kearney (No. 734). Near
Juneau, Grace E. Cooley, Aug. 6, 1891. Shark Bay,
Euermann, 1895 (No. 109).

Liarella L.

(lobed or trifoliate)

Perennial herbs with mostly basal, leaves
and racemose or paniculate, white flowers;
~~leaves lobed or trifoliate~~; ~~flowers~~
petals 5 ^{inter} ~~of 5~~ ^{values of the capsule unequal} stamens 10, exserted; ovary 1-celled,
styles 2; seeds usually ~~but~~ ^{few} ~~about 6~~ ^{from eastern}
species, natives of North America, ~~central~~
Asia, the Himalayas and Japan.

*Liarella trifoliata**Liarella trifoliata* L. Sp. Pl. 1: 406, 1753.

Stems 20 to 40 cm. high, usually glabrous
below, puberulent above; leaves ~~trifoliate~~,
the leaflets incisely toothed, ^{usually} hispid at
least above; flowers ^{small} with filiform petals.
Shady places especially in spruce forests
from ~~Prince William Sound to Wrangell~~
and ^{the Shumagin Islands} ~~to~~ Washington. Originally described
from northern Siberia.

Key to the Species.
Leucis trifoliata
Leucis trifoliata
Leucis trifoliata

Alutian Chain. — Unga Island, F. A. Golder,
1899 (No. 7).

Prince William Sound. — Area, F. A. Golder,
1899 (No. 14). Virgin Bay, Coville & Kearney (No. 1229).

Jakutat Bay. — Kluantak Island, Funston,
1892 (No. 16). Head of Russell Fjord, Coville &
Kearney (No. 935).

Southeastern Alaska. — Juneau, Coville
& Kearney (Nos. 535, 2472), Sitka, Coville &
Kearney (No. 802), Eummann, 1892 (No. 194),
Evans, 1897 (No. 175), Bischoff, 1865-66, Tilling,
1867 (No. 53), Wrangell, Evans, 1897 (No. 79),
Yas Bay, Lorman, 1895 (No. 196), Selma Bay,
Cleveland Peninsula, J. B. Flett, 1901 (No. 1945).

Tiarella unifoliata Hook.

Tiarella unifoliata Hook. Fl. Bor. Am. 1:238, t. 8,
1834.

Sparsely pubescent or nearly glabrous,
stems 15 to 40 cm. high; leaves cordate, acute
obscurely 5- to 7-lobed, petals filiform as in the
preceding. Reported from Portage Bay, south-
eastern Alaska and ranges southward to
California. Originally described from
"near the source of the Columbia and at
Portage River." No Alaskan specimens have
been seen.

Heuchera L.

Perennial herbs, usually with horizontal rootstocks, ~~and some~~ mostly basal leaves and small, commonly inconspicuous ^{entire} flowers in cymose panicles; ^{exserted} petals 5, stamens 5; ~~sepal~~ + ~~cellar~~, styles 2; seeds numerous, minutely hispid or muriculate. A genus of about 34 species confined to ^{natives of} North America and the mountains of Mexico.

Heuchera glabra Willd.

Heuchera glabra Willd.; Baum. & Schult. Syst. 6: 216. 1820.

Heuchera divaricata Fisch.; DC. Prodr. 4: 37. 1830.

~~glabrous~~
Stems 15 to 40 or sometimes even 50 cm. high, ~~glabrous~~ ^{usually cordate} leaves rounded in outline & ~~glabrous~~ or very rarely slightly hispid below, usually orbicular-cordate or ovate-cordate, 5 to 7 lobed, acutely toothed, the basal ones long petioled, cauline usually short petioled, branches of the panicle divaricate, ^{pedicels and} pedicels glandular, common, especially on dry cliffs near ± sea-level from Nushagak to the southern boundary and thence to Oregon. Originally described from northwestern North America ^{the localities of} H. divaricata, "In Asia borealis insulis Kadiak et Sitka ----- et etiam in Kamtochatka."

Bristol Bay and Vicinity. - Upper Aleknagik Lake, Johnson [?] July 19, 1882.

Alaska Peninsula. - Wrangell Bay, F.C. Sissett, July, 1890. Bailey Harbor, C.H. Townsend, Sept. 10, 1893. ~~Kukuk~~ Bay, Coville & Kearney (No. 1629).

Alutian Chain. - Unalaska Island, L.A. Golder, 1900 (No. 88). Nagai Island Harrington, 1871-72. Poff Island, Kirkland, July 8-19, 1899.

Kodiak Island. - Evans, 1897 (No. 339), Coville & Kearney (No. 2274), Kellogg, 1867 (No. 257).

Lake Iliamna region. - Iliamna Point, Lorman, 1902 (No. 120).

Cook Inlet. - Halibut Cove, Coville & Kearney (No. 2427).

Prince William Sound. - Near Area, Coville & Kearney (No. 1326). Port Wells, Coville & Kearney (No. 1273).

Yakutat Bay. - Hainke Island, Coville & Kearney (No. 1105). Head of Russell Fjord, Coville & Kearney (No. 958). Sixteen miles north of Mission, Luntson, 1892 (No. 59).

Southeastern Alaska. - Summit of White Pass R.S. Williams, 1899. Juneau, Coville & Kearney (No. 2519). Canby, 1897 (No. 81). Grace E. Colby, Hunt Institute for Botanical Documentation

23.

July 24, 1891. Litha, Evermann, 1892 (No. 285),
Evans, 1897 (No. 216), Riedhoff, 1865-66, Bailey
Bay, Garmen, 1895 (No. 192), Helm Bay, Cleveland
Pinnula, J. B. Flett, 1901 (No. 1943).

Saxifraga L.

Perennial herbs with scapose or sometimes leafy flowering stems; ~~and a basal~~ ~~leaves~~ leaves entire, toothed or lobed; ~~flowers perfect,~~ calyx ~~5 parted,~~ free or united to the base of the ovary; petals 5, stamens 10, inserted with the petals; ~~ovary~~ ovary superior or partly inferior, ~~commonly 2 celled, rarely 4 or 8 celled,~~ seeds small, numerous. About 210 species, mostly natives of the Northern hemisphere, particularly of the cooler parts of the North temperate zone. A few species in the Andes.

0 ~~neither lobed nor~~ ~~neither~~ ~~nor~~
 Leaves all entire, ^{teethed} their margins, ^{toothed} ~~fin~~ ^{fine} bristly,
~~or ciliate.~~

10 Flowering stems 2 to 5 cm. high; flowers about
 10 mm. broad; leaves coriaceous.

S. serpyllifolia

10 Flowering stems 4 to 15 cm. high; flowers 15
 to 20 mm. broad, or sometimes even
 larger; leaves not coriaceous.

S. hirculus.

0 ^{teethed, or when entire}
 Leaves lobed or, their margins ^{teethed} ~~fin~~ ^{fine} bristly
 or ciliate.

10 Leaves ^{with their margins ciliate or finbristly,}
~~neither lobed nor~~ ~~teethed~~, their margins
~~ciliate or finbristly.~~

15 Leaves opposite; petals purple.

S. oppositifolia.

15 Leaves alternate; petals ^(yellow or) yellowish.

S. coehrschaltzii.

20

Plant flagellate.

S. flagellaris.

20

Plants not flagellate.

25 Flowers barely exceeding the
 leafy shoots.

S. coehrschaltzii.

25

Flowers borne on scape-like
~~branching~~ stems, conspicuously
 exceeding the leafy shoots.

S. monochialis.

15

Leaves lobed or toothed, sometimes both toothed and ciliate.

20 Leaves orbicular or reniform in outline, usually deeply lobed or toothed, ~~sharply~~ ^{contracted} to the slender petiole.

25 Flower-bearing stems leafy ~~stems~~,

30

Flowers conspicuous, the petals ^{usually} 2½ to 3 times as long as the calyx. Flowers solitary; upper leaves bearing bulblets in their axils.

S. cernua.

30

Flowers not conspicuous, the petals ^{usually} less than twice the length of the calyx. Flowers rarely solitary, none of the leaves bearing bulblets in their axils.

33

Inflorescence with ^{one or more} foliaceous bracts nearly or quite equaling the lower leaves in size.

S. bracteata.

33

Inflorescence with foliaceous bract absent or reduced, never equaling the lower leaves in size.

S. rivularis.

25

Flower-bearing stems scape-like, the ~~upper~~ ^{stems} leaves when present, reduced and bract-like.

30

Leaves incisely lobed, the short
lobes ^{mostly} ~~32~~ toothed.

S. mertensiana.

30

Leaves incised or toothed, the teeth
simple.

33

Leaves 1 to 1.5 cm. broad;
segments of the calyx erect after
anthesis.

S. neglecta.

33

Leaves 1.5, rarely smaller, to 10
cm. broad; segments of the
calyx reflexed after anthesis.

36

Leaves ^{usually} with rounded, acute
teeth, the sinus narrow;
flowers white or pinkish.

S. nelsoniana.

36

Leaves with triangular, acute
teeth, the sinus open; flowers
yellow.

S. spicata.

15

Leaves oval, ovate, oblong or cuneate-
obovate to flabelliform.

20

Leaves oblong, broadly oval or ovate; the margins repand or dentate, rarely entire below the middle, ~~when dentate the blade abruptly contracted to the petiole.~~

25

Leaf margins repand; flowers in a spicate raceme.

S. hirsutifolia.

25

Leaf margins dentate; flowers ~~in an open panicle~~ ^{paniculate} or more or less condensed in a terminal cluster.

30

Segments of the calyx reflexed after anthesis.

S. reflexa.

30

Segments of the calyx erect after anthesis.

S. nivalis.

20

Leaves cuneate-oblong ~~to~~ ^{to} cuneate-oblanecolate or flatelliform, the margins very rarely dentate, ~~or~~ ^{or both} below the middle.

25

Leaves 3- to 5-lobed, ~~at the apex.~~

S. silviflora

25

Leaves merely dentate or toothed.

30

Leaves flabelliform.

33

*Panicle effuse, the branches elongated; scapes glabrous.**S. lyalli.*

33

*Panicle contracted, the branches usually short; scapes hairy.**S. daurica.*

30

Leaves cuneate-oblong or cuneate-oblanco-lanceolate.

33

*Leaves stiff, 3-toothed at the apex.**S. tricuspidata.*

33

Leaves not stiff, usually several toothed.

36

*Flowers few or solitary, mostly replaced by tufts of leaves.**S. canosa.*

36

*Flowers several, cymose-paniculate.**S. bangardi.*

Saxifraga serpyllifolia Pursh.

Saxifraga serpyllifolia Pursh, Fl. 1: 310, 1814.

Cespitose, leaves oblong or oblanceolate, nearly ^{or quite} sessile, rounded at the apex, 5 to 10 mm. long, ^{about} 1.5 mm. broad; flowering stem glandular; flowers bright yellow. Arctic and alpine from Cape Lisburne and St. Lawrence Island to the Shumagin Islands and the Copper River region on the main land. Originally described from "the north-west coast." It occurs on the Asiatic side of Bering Sea and has also been reported from the alpine regions of the Altai mountains. ~~on Asia~~ This is the *S. oppositifolia* Gray reported by Merriam, Pac. Isl. Soc. Wash. 7: 140, 1892, Islands of Bering Sea - St. Matthew Island, Caville & Kearney (No. 2156), J. M. Macoun, Aug. 11, 1871. Hall Island, Caville & Kearney (No. 2018).

Pribilof Islands - St. George Island, B. W. Evermann, 1892 (No. 103). St. Paul Island, Merriam, Aug. 7, 1891, Wm. Palmer, 1890 (No. 345), Luce & Prentiss, 1895 (No. 71).

Bentley's Chain - Unga Island, Evans, 1897 (No. 553), F. A. Golder, 1900 (No. 74).

Alaska Peninsula - St. Lawrence Bay, Palache July 8 to 19, 1899.

Between Cook Inlet and Rampart City. — 3000 ft.
Above valley of Happy River, Brooks & Prindle,
July 13, 1902.

Copper River region. — at 5500 ft. alt., W.L.
Peto, 1902 (No. 29).

Saxifraga hirculus L.

Saxifraga hirculus L. Sp. Pl. 1: 402. 1753.

Cespiteae, leaves ^{linear or} linear-lanceolate, ^{rarely oblong, obtuse,} the
basal ones attenuate to a petiole ~~obtus~~ at
1.5 to 30 mm. long, 1.5 to 3 mm. broad; flower-
ing stem fulvous hairy or sometimes glabrous
below; flowers very conspicuous, yellow. ~~to~~
~~large or moist places~~ Arctic and alpine in
bogs or moist places from Point Barrow
to the Prindle and Alutian Islands and
to the Copper River region. It ranges through
arctic and sub-arctic ~~North America~~ British America
to Labrador, and occurs in arctic and
alpine Europe and Asia. The type localities
given by Linnaeus are "Suecia, Helvetia,
Laponia, Sibiria."

Arctic Alaska. - Colville Delta, Schrader, Aug. 17, 1901. Point Barrow, Murdock, 1883. Kowak River, Mc. Lingen, 1884. Point Hope, J. L. White, July 31, 1874.

Seward Peninsula. - Vicinity of Port Clarence, L. A. Walpole, 1901 (Nos. 1671, 1760, 1866, 1990), L. R. Bean, Sept. 9, 1880, Cassile & Kearney (No. 1909). Kruksamepa River, A. J. Collins, 1900. 3 miles north of Nome City, J. B. Flett, 1900 (No. 1625).

Between Norton Sound and Bristol Bay. - Cape Vancouver, J. M. Macoun, Aug. 9, 1891.

Pribilof Islands. - St. Paul Island, Merriam, Aug. 8, 1891.

Alutian chain. - Pofapp Island, Kirkaid, July 8-19, 1899, Saunders, July 7-15, 1899, Unga Island, Evans, 1897 (No. 559), L. A. Golder, 1899 (Nos. 3972, 90).

Kodiak Island. - Karluk River, L. R. Bean, Aug. 21, 1889. English Bay Mountain, L. A. Walpole, ~~Aug~~ 1900 (No. 1223).

Alaska Peninsula. - ~~Point~~ Sitsavak Bay, Palache, July 8-19, 1899.

Cook Inlet. - Kasilof, Evans, 1898 (No.

767)

Lake Iliamna region. - Lake Iliamna, Euman, 1902 (No. 273).

Between Cook Inlet and Rampart City. —
Luskokwim Valley, Brooks & Prindle, July 21, 1902.
Copjar River region. — W. L. Peto, 1902 (No.
 111).

Saxifraga oppositifolia L.

Saxifraga oppositifolia L. Sp. Pl. 11402. 1753.

Saxifraga pulvinata Small in Britton & Rydb. Bull.
 N. Y. Bot. Gard. 2: 172. 1901.

branched,
 stems prostrate or the flowering branches
 sometimes ascending; leaves crowded on the
 stems, ~~usually, lower-lapping~~, ^{though not always, approx. mate or over-lapping}, ~~obovate, rounded~~
~~at the apex~~ or spatulate, rounded at the apex,
 1.5 to 5 mm. long; flowers conspicuous. In
 moist cliffs and among morainal boulders
 from Point Barrow to Juneau and the upper
 Yukon, southward to Oregon and Wy-
 oming and eastward to Newfoundland
 and Vermont. ~~Widely~~ widely distributed
 in Europe and Asia. Original localities
 given by Linnaeus are ~~Alpinum Spitzbergen-~~
~~sium, Lapponicarium, Pyrenaicarium~~
 Spitzbergen, Lappland, Pyrenees, Switzer-
 land.

S. pulvinata is described as differing from
S. oppositifolia in the smaller size, the marked
 ly naked ~~part~~ upper part of the flowering stems,
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the smaller turbinate hypanthium and the slender tips of the follicles". The specimen cited in the description however, does not appear to differ from many other specimens of S. oppositifolia from both ~~the~~ Alaska and Europe. While the ~~specimen~~ cited is smaller than many none of the flowering stems are naked for more than 7 mm, while several of them are leafy to the base of the flower, a ~~case~~ variation that is quite frequent in American as well as in foreign material. Neither does the hypanthium appear to be smaller, nor the tips of the follicles more slender than in other material at hand.

is more a dwarf, pubescent specimen of S. oppositifolia and does not differ from other material at hand ~~from~~ both European and American. The "markedly naked upper part of the flowering stems" are in no instance more than 7 mm. long, while many of them are very leafy throughout. The specimen cited was collected near the higher summits about Lake Bennett.

Arctic Alaska. — Point Barrow, Murdoch, 1888.
John River, Schrader, June 28, 1901.

Kuward Peninsula. — Vicinity of Port Clarence,
F. A. Walpole, 1901 (Nos. 1424, 1484, 1786, 1996). Between
Cape Nome & Port Clarence, Collier, June, 1901.

Islands of Bering Sea. — St. Matthew Island, Camille
& Kearney (No. 2182).

Alutian Chain. — Unalaska, Harrington, 1871-72.

Kodiak Island. — B. J. Britherton, 1894 (No. 412),
Sturgeon River, Camille & Kearney (No. 2283).

Alaska Peninsula. — Kukak Bay, Camille &
Kearney (No. 1623).

Prince William Sound. — Port Wells, Camille
& Kearney (No. 1283).

Gakutat Bay. — Hubbard Glacier, Disenchantment
Bay, Camille & Kearney (No. 1069).

Copper River Region. — W. L. Polo, 1902 (No. 23).
Chitina Bay, Camille & Kearney (Nos. 618, 717).

Southeastern Alaska. — White Pass, A. L. Patton,
1898, Between Skagway & White Pass, Camille & Kearney
(No. 526). Juneau, Camille & Kearney (No. 547).

Upper Yukon. — Higher summits near Lake
Bennett, J. B. Larrison, 1899 (No. 11).

Saxifraga flagellaris Willd.

Saxifraga flagellaris Willd.; Stueb. Rev. Saxif.

25. 5. 6.

(or 2 cm. high,

3.5 to 10 cm. high, or in arctic specimens sometimes).

Flowering stem erect, simple, 1 to several-flowered; ^{leaves tipped with a rigid bristle (or obtusely)} ~~erect~~; basal leaves ~~obovate~~ ^{obovate}-spatulate, the ^{upper} ~~cauline~~ ^{cauline} ~~obovate~~ ^{obovate} or ^{obovate} ~~linear~~; flowers yellow, about 10 to 15 mm. broad.

Arctic and alpine, on cliffs from Arctic Alaska Point Barrow to the Alaskan Peninsula and Kodiak Island. Reported to range southward in the Rocky Mountains to lat. 41° and across arctic America to Greenland. It occurs in arctic Europe and in arctic and alpine Asia. Originally described from

Alutian chain. — Popsk Island, Kinkaid,

July 8 to 19, 1899.

Kodiak Island. — Kodiak, Combs & Kearney

(No. 2311).

Alaska Peninsula. — Sitkas Bay,

Palache, July 8 to 19, 1899.

Saxifraga eschscholtzii Stenb.

Saxifraga eschscholtzii Stenb. Rev. Saxif. Suppl.
1: 9. t. 10. f. 3. 1822.

Saxifraga fimbriata D. Don, Trans. Linn. Soc. 13!

Stems prostrate, forming dense, cushion-like mats; leaves closely ^{obovate, attenuate at the base} imbricated on the short branched ^{spatulate} ~~obovate~~ rounded at the apex, about 3 mm. long; flowers on short peduncles, solitary, calyx lobes fimbriate.

In sterile soil among scanty vegetation from Cape Lisburne to the Shumagin Islands and Alaska Peninsula. Reported also from the Arctic sea-shore west of the Mackenzie River. Type locality

Seward Peninsula - Port Clarence, ~~Candler~~
~~Hearney~~ No. Trelease (No. 4019), Fernald
(No. 1979), F. A. Wolfsole, 1901 (Nos. 1452, 1583).

Alaska Peninsula. - Atkasook Bay, Palache,
July 8 to 19, 1899.

Alutian Chain. - Popoff Island, Kirkaid,
July 8 to 19, 1899.

Saxifraga branchialis L.

Saxifraga branchialis L. Sp. Pl. 1: 400, 1753.

~~Sax~~ *Cuscuta* ^{the} sterile shoots much branched, ~~usually~~ ^{sometimes} ~~forming~~ flowering stems ascending; leaves usually stiff, linear to oblong or lanceolate, mucronate, glabrous except the ciliate margin; scapes 3 to 12 cm. high, ^{very} rarely ~~are~~ somewhat shorter; glabrous or very ^{nearly} so; flowers corymbose or rarely solitary, peduncles usually slender, petals 5 to 7 mm. long. On rocky ledges and among boulders from Kotzebue Sound ^{the Aleutian Islands and} to Juneau ~~and~~ in Southeastern Alaska. Reported to extend southward in the Rocky Mountains to lat. 49°. ~~Widely distributed in Siberia, originally~~ ~~described~~ Originally described from Siberia where it is widely distributed.

Arctic Alaska. - Baird Mountains.

G. M. Stoney, Aug. 2, 1885.

Keward Peninsula. - Port Clarence.Camille & Kearney (No. 1950), F. A. Walsole, 1901
(Nos. 1586, 1760 & part). 5 Miles north of Nome City.
J. B. Flitt, 1900 (No. 1595).Islands of Bering Sea. - Hall Island, Camille
& Kearney (No. 2010).Alaska Peninsula. - Berendun Bay, H. C.
Fassett, July, 1890. Stipsawah Bay, Palache, July 8
to 19, 1899. Kukak Bay, Camille & Kearney (No. 1652).Alutian Chain. - St. Atlee Island, J. M.
Macann, Aug. 29, 1891. Popof Island, Kirkaid,
July 8 to 18, 1899. Nagai Island, Barrington,
1871-72. Unga Island, Evans, 1897 (No. 554).Kodiak Island. - Kellogg, 1867 (No. 271),
Evans, 1897 (No. 363).Yakutat Bay. - Disenchantment Bay, Lunston,
1892 (No. 91).Southeastern Alaska. - Near Juneau,
Grace E. Cooley, Aug. 3, 1891.Lake Iliamna Region. - Iliamna Point,
Gorman, 1902 (No. 311). Iliamna Bay, Gorman, 1902
(No. 22).

Rapifraga cernua L.

Rapifraga cernua L. Sp. Pl. 1: 403. 1753.

Stem ~~usually~~ ^{on some what} ~~erect~~ ^{erect}, ~~or ascending~~ ^{sparingly hairy, ~~sterile~~ glandular above}, basal and lower cauline leaves ~~or~~ ^{or} lobed to the middle or beyond; upper cauline lobed nearly to the base or linear and entire, ~~or~~ bearing ^{stems} bulblets in their axils and flower solitary ^{or} with axillary branches and flowers 2 to several; flowers ^{including the} ~~with~~ petals 7 to 12 mm. long, entire or slightly emarginate. ^{on St. Lawrence Island and ranges from} ~~at~~ ^{Point Barrow to} ~~and~~ ^{and} ~~Point Barrow~~ ^{on the} ~~and~~ ^{Yukon} ~~mouth of the Mackenzie through arctic~~ ^{and} ~~British America to~~ ^{and} ~~Greenland, Newfoundland, Labrador and~~ ^{and} ~~Greenland.~~ ^{and} ~~Originally~~ ^{and} ~~described from Lapland and widely distributed in arctic and alpine Europe and Asia.~~

Arctic Alaska.— Point Barrow, Murdoch, 1883. Point Hope, J. T. White, July 31, 1894. Cape Espenberg, J. T. White, July 29, 1894.

Seward Peninsula.— Fort Clarence, F. A. Walpole, 1901 (Nos. 1599, 1608, 1754, 1881, 1916), 16 Miles west of Nome City, J. B. Lott, 1900 (No. 1598), 5 Miles north of Nome City, J. B. Lott, 1900 (No. 1599). Upper Yukon— Coal Creek Hill, Lunston, 1893 (No. 96).

Saxifraga bracteata D. Don.

Saxifraga bracteata D. Don, Trans. Linn. Soc. 13
367, 1822.

Saxifraga Laurentiana Ser.; DC. Prodr. 4: 33, 1830.

Saxifraga ciliaris Laurentiana Engler, Mon. Saxif.
185-1872. arachnoid

the flowering stems at last above and the ped-
uncles, ~~clothed~~ ^{adorned} with long intricate hairs
6 to 30 mm. broad, ~~several~~ ^{several} weak, leaves
lobed, the lobes ~~1/2~~ ^{1/3 to 1/2} as long as the
leaf, usually about as broad as long;
flowers ~~some what~~ ^{usually 3 to 5} capitate, conspicuously
inverted by the large foliaceous bracts
~~giving~~ ^{the} the inflorescence a ^{peculiar} somewhat capitate appearance,
petals 4 to 5 mm. long. Moist sandy or
gravelly soil, sometimes on dripping shaded
cliffs from Point Barrow to Prince William
Sound, also on the Islands of Bering Sea
and the Aleutians. Originally, ~~also~~ occurs
~~also~~ in eastern Siberia, the type locality.

S. bracteata varies greatly in size
and the specimen reported by Gray

Gray in Ray, Report Int. Polar Exp. to Point Barrow,
House of Representatives, Ex. Doc. No. 44.

as *S. ciliaris hypnorum* appears to be only
a depauperate form.

Arctic Alaska. - Point Barrow, Murdoch, 1888.

Seward Peninsula. - Vicinity of Port Clarence, F.R. Walpole, 1901 (No. 1750 in part).

Islands of Bering Sea. - St. Lawrence Island, Couille & Kearney (No. 1993). St. Matthew Island, Couille & Kearney (Nos. 2135, 2152).

Pribilof Islands. - St. George Island, Tine & Prentiss, 1895 (No. 56). St. Paul Island, com. Palmer, 1890 (No. ¹⁶387), J. M. Macoun July 28, 1891, C.H. Merriam, July 30, ^{Aug. 4} 1891, ~~Aug. 4~~ Tine & Prentiss, 1895 (No. 7), Couille & Kearney (No. 1826).

Alutian Chain. - Adak Island, ~~St.~~ C.H. Townsend, July 1, 1893. Unalaska, L. M. Turner, 1878, B. W. Evermann, 1892 (No. 23). Shumagin Islands, Harrington, 1871-72.

Kodiak Island. - Evans, 1897 (No. 365).

Alaska Peninsula. - Kukak Bay, Couille & Kearney (No. 1591).

Prince William Sound. - Port Wells, Couille & Kearney (No. 1281).

Saxifraga rivularis L.

434.

Saxifraga rivularis L. Sp. Pl. 11204. 1758.

commonly erect,
stems, 2 to 10 cm. high, somewhat arachnoid,
at least above, as in the preceding; basal
leaves, 3 to 10 mm. broad, 3- to 5-lobed or
^{the lobes larger than broad or, only as long,}
sometimes 5-lobed, bracts entire or 3-lobed;
flowers 1 to 6, petals about 4 mm. long,
in moist, grassy and rocky places from
Port Clarence to Yakutat Bay, apparently not
very common.

S. rivularis is distinguished from
S. bracteata chiefly by its smaller size, the
shorter petioles of its ~~basal~~ basal leaves, the
very much smaller bracts subtending the
inflorescence and in its flowers not
appearing at all capitate. Some forms of
the two species, however, approach each other
very closely.

Seward Peninsula. - Port Clarence,
Coville & Kearney (No. 1951), L. A. Walpole, 1901
(Nos. 1606, 1899, 1900).

Lake Iliamna Region. - Near Lake Clark,
Garman, 1902 (No. 218). Lake Iliamna, Garman,
1902 (No. 151).

Yakutat Bay. - Haulke Island, Disenchant-
ment Bay, Coville & Kearney (No. 1109).

Saxifraga mertensiana Bong.*Saxifraga mertensiana* Bong. Mem. Acad. Petrosb.

II. Math. & Nat. 2: 141. 1831.

Saxifraga heterantha Hook. Fl. Bor. Am. 1: 252.

B. 78. B. 1834.

Slightly succulent.

erect or ascending, flowering stems ^{erect or with very small branches} naked or with very small
 2, 12 to 30 or even 40 cm. high, glandular
 hairy; basal leaves long petioled, 2 to 6 cm.
 broad, glabrous or hairy, the lobes 3-
 toothed except near the base ^{of the leaf}, very rarely
 4 or 5 toothed; flowers in an open panicle;
 petals about 4 mm. long. On moist, shaded
 rocks from Prince William Sound to
 Sitka, the type locality, ^{thence southward to the Columbia River} *S. heterantha* was
 described from material collected along the
 Columbia River, ~~and at Cape Disappoint-~~
~~ment~~

Prince William Sound. - Port Wells, Conville
 & Kearney (No. 1282). Near Area, Conville & Kearney
 (No. 1305).

Lakutat Bay. - Base of Mt. Sedukof,
 Furston, 1892 (No. 41).

Southeastern Alaska. - Juneau, Conville &
 Kearney (Nos. 561, 586). Sitka, Evans, 1897
 (No. 176).

Saxifraga neglecta Bray.*Saxifraga neglecta* Bray; Stumb. Riv. Saxif.Saxif. 119. f. 1.

Glabrous or nearly so, the scapes 1 or 2, ^{(with}
~~stems~~ 6 to 13 cm. high; ~~stems~~ leaves ^{rather}
~~short~~ petioled, ^{blades} shorter than or but little ~~+~~
^{longer than} the length of the leaf, glabrous or
 sometimes sparingly glandular ciliate, deeply
 toothed; the teeth triangular or triangular-ovate,
^{in flower} ~~flowers~~ somewhat corymbiform, flowers
 with petals about 4 mm. long. Apparently
 rare in Alaska, collected on St. Lawrence
 Island, Seward Peninsula and
 Unalaska. Eastern Range through southern
 and eastern Siberia. Type locality —

Islands of Bering Sea. — St. Lawrence
 Island, J. T. White, Aug. 27, 1894, J. M. Ma-
 coun, Aug. 15, 1891.

Seward Peninsula. — Fort Clarence, F. A.
 Wolfde, 1901 (No. 1724). ~~Higley~~ Higley Moun-
 tain, Alfred Brooks Aug. 1, 1900, 16 miles
 west of Nome City, J. B. Flitt, 1900 (No. 1602).

Alutian Chain. — Unalaska, J. B. Flitt,
 1900 (No. 1788).

Saxifraga nelsoniana D. Don.

Saxifraga nelsoniana D. Don, Trans. Linn. Soc.
1855, 1822.

Saxifraga arguta D. Don, l.c. 356.

Saxifraga austriacalis Fisch. ~~Munz~~ ?
1.5 to 6 cm, broad, glabrous (rare)

Leaves all basal, long petioled, the
petioles hairy at least ~~above~~ toward the
blade of the leaf ~~coarsely~~ ^{coarsely} dentate, the
teeth rounded or ~~or~~ triangular-ovate;
scapes 5 to 30 cm. high, ~~are~~ solitary or two
or three, hairy, rarely glabrate; inflorescence
usually a ^{short} compact thyrse, rarely ~~some-~~
~~what~~ the flowers rarely with longer pedicels
and the inflorescence somewhat spreading;
flowers with petals about 4 mm. long,
almost everywhere in springy places, along
brooks, on moist cliffs and in moist
soil near beaches from Point Barrow
to south eastern Alaska, Type locality
Cape ~~St~~ St ~~Newtonham~~ ^{Newtonham} Nevenham, Bristol Bay.
Reported also from Kamchatka.
S. arguta was described from the North
west coast.

The specimen collected by Murdoch at
Point Barrow and designated var. nana
by Gray is merely a reduced form and

Arctic Alaska. - Point Barrow, Murdoch, 1883.
Cape Smythe, J. L. White, Aug. 5, 1894. Cape Sabine,
J. L. White, Aug. 12, 1894. Clear Forkham Inlet, G. N.
Stoney, June 30, 1886.

Seward Peninsula. - Port Clarence, F. A.
Walpole, 1901 (Nos. 1459, 1464, 1597, 1970, 2002),
Camille & Kearney (No. 1912), 16 miles west of
Nome City, J. B. Flett, 1900 (No. 1598), 5 miles
north of Nome City, J. B. Flett, 1900 (No. 1596). Galofuin
Bay, A. J. Collier, July 4, 1900.

Bristol Bay and Vicinity. - Mucklung River,
Johnson [?], July 26, 1882.

Islands of Bering Sea. - Hall Island, Camille &
Kearney (No. 2079). St. Lawrence Island, Camille &
Kearney (No. 1991). St. Matthew Island, Camille & Kearney
(No. 2167), J. M. Macoun, Aug. 10, 1891.

Pribilof Islands. - St. George Island, Evermann
1892 (No. 102), Lane & Prentiss, 1895 (No. 53). St. Paul
Island, Wm. Palmer, 1890 (No. 423), Lane & Prentiss, 1895
(Nos. 105), C. H. Merriam, July 30, 1891, Camille & Kearney
(No. 1823).

Alutian Chain. - Atka Island, L. M. Turner,
1880 (No. 1220). Unalaska, J. M. Macoun, July 20,
1891, Evermann, 1892 (Nos. 59), J. C. Russell, June
29, 1889. Popoff Island, Harrington, 1871-72.

Alaska Peninsula. - Herenden Bay, C. H.

Townsend, July 12, 1890. Stipsavak Bay, Alaska, July 8 to 19, 1899. Kukak Bay, Camille & Kearney (Nos. ⁶²⁴ 1663).

Lake Iliamna Region. - Iliamna Bay, Gorman, 1902 (No. 17).

Cook Inlet. - Haliduk Cane, Camille & Kearney (No. 2432).

Between Cook Inlet and Rampart City. - Upper Kuchakaw Valley, Brooks & Prindle, July 9, 1902.

Prince William Sound. - Port Wells, Camille & Kearney (No. 1265).

Cape Fair River Region. - W. L. Palo, 1902 (No. 70).

Gakutat Bay. - Hubbard Glacier, Disenchantment Bay, Camille & Kearney (No. 1081), Base of Mt. Leberkey, Linsdon, 1892 (No. 40).

Southeastern Alaska. - Inneson, Camille & Kearney (Nos. 563, 2518). Sitka, B. W. Evermann, 1892 (No. 267), Evans, 1897 (Nos. ¹⁷³ 59), Tilling, 1867 (No. 403). Yes Bay, Gorman, 1895 (No. 66). Summit of high mountains, Yes Bay, ~~Gorman~~ Howell, 1895 (No. 1622).

are not white as described, but though
~~very~~ ~~not~~ ~~of~~ ~~flower~~ old ~~not~~ and slightly faded, the petals are plainly
 yellowish. The plant is described as being
 related to S. punctata L. ~~by which~~ while S.
spicata is not mentioned, ~~and is present~~

Valley of Alabma River. — About 15 miles
 above the mouth of the river, W.C. Mendenhall,
 July 20, 1901.

Seward Peninsula. — 16 miles west of
 Nome City, J. B. Little, 1900 (No. 16 ad).

Norton Sound. — Ft. St. Michaels,
 Bannister, 1865-66.

Between Norton Sound & Bristol Bay. —
 Cape Van Couver, J.M. Macoun Aug. 9,
 1891.

Lower Yukon. — Between Andreafski &
 Anvik, I. C. Russell, July 16-18, 1889. Rampart,
 Isaac James, 1901 (No. 58). Five miles below
 Ft. Hamlin, 1902 (C. A. J. Collier, 1902 (No. 153).

Upper Yukon. — Near Indian River,
 J. B. Tarleton, 1899 (No. 116).

Saxifraga hircifolia Waldst. & Kit.

Saxifraga hircifolia Waldst. & Kit. Plank. Rar. Hung.
17, 18.

Leaves oval, oblong or sometimes nearly lanceolate, attenuate to the usually winged petiole, ^{inconspicuously} repand or very rarely entire; glabrous except for the ciliate margins; scape strict, hairy, 6 to 30 cm. high; flowers short pedicelled, petals reddish. Springs places especially on the tundra from Point Barrow to Seward Peninsula and the Pribilof Islands. Reported to occur in the Arctic Islands and through northern British America to Greenland. Apparently widely distributed in arctic and alpine Europe and Asia. Type locality

Arctic Alaska. - Point Barrow, Murdoch, 1883. Cape Smyth, J. L. White, Aug. 5, 1894

Seward Peninsula. - Pt. Clarence, Coville & Kearney (No. 1935), F. A. Walpole, 1901 (Nos. 1508, - 1780, 1998).

Islands of Bering Sea. - Chukivak Island, J. M. Macoun, Aug. 7, 1871. Hall Island, Coville & Kearney (No. 2034).

Pribilof Islands. - St. Paul Island, C. H. Merriam, July 30, 1871.
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Saxifraga reflexa Hook.

Saxifraga reflexa Hook. *Fl. Bor. Am.* 1: 249, t. 85.
1834

Saxifraga radulina Greene, *Pitt.* 3: 305, 1895.

Leaves almost hairy with ^{the} appressed
subsemine, ^{sometimes purplish,} oval or ovate, narrowed to
a rather broad petiole; scapes to several,
7 to 25 cm. high ^{commonly} usually hairy; panicle
usually compact, ^{or imbricate,} sometimes somewhat-
corymbose or thyrsoïd; petals with an
orange ^{or yellow} spot near the base, filaments
dilated. Upper Yukon and Copper River
region to the shores of the Arctic sea between
the Mackenzie and Coppermine rivers.
Originally described from the last named
locality.

S. radulina was described from the
Porcupine River ~~from according to the description~~
~~affords no character that would separate it~~
~~does not differ from~~ *S. reflexa* and the
type specimen

Upper Yukon. - Forty Mile Creek, Laramie,
1893 (No. 63). Dry Gulch, Laramie, 1899 (No. 954).
Five Finger Rapids, Laramie, 1899 (No. 59).

Copper River region. - ~~W. L. Pitt~~ Klutina
River, W. L. Pitt, 1892 (No. 5).

Saxifraga nivalis L.

Saxifraga nivalis L. Sp. Pl. 1: 406. 1753.

Leaves variable, ovate, oval, oblong or
obovate, dentate or sometimes entire toward the
base, glabrous and usually green above,
glabrous or pubescent below. ^{and} Sometimes pur-
plish below, ciliate on the margin; ^{Sometimes sparingly so} ~~leaves~~ ^{leaves}
commonly solitary, 4 to 18 cm. high, hairy;
inflorescence ~~contracted~~ ~~pro~~ compact; petals
white or in dried specimens sometimes
purplish, filaments very little or not at all
dilated. Grows on moist cliffs from sea-
level to 1800 ft. elevation and among
morainal boulders near the edges of glaciers.
Range ^{along the coast} from Cape Lisburne to Yakutat Bay.
Reported to range south in the Rocky Moun-
tains to Arizona, on the arctic ~~islands~~ islands
and through ~~north~~ arctic British America to
Labrador and Greenland. Also in northern
Europe and through Siberia to Kamchatka.
Type locality "in summis Alpibus Spitzbergeniensibus,
Lapponicis, Aronicis, Virginia, Canada." The
last two localities probably refer to *S. virginensis*
Michx.

Lake Iliamna Region. — Lake Iliamna,
Garman, 1902 (No. 100), Nogheeling Rapids,
Garman, 1902 (No. 312).

Alutian Chain. — Popof Island, Harrington,
1871-72.

Alaskan Peninsula. — Kukak Bay, Couille &
Kearney (No. 1665).

Kodiak Island. — Kodiak, Evans, 1877 (No. 362).

Yakutat Bay. — Haunke Island, Disenchant-
ment Bay, Couille & Kearney (No. 1108).

Saxifraga cespitosa L.

Saxifraga cespitosa L. Sp. Pl. 11404, 1753.

Saxifraga sileneflora Sturb.; Cham. Linnaea
Lii 557, 1831.

Densely matted, the leaves cuneate or flabelliform ~~at the~~ ^{attenuate} and narrowed to ~~slender~~ the base, 8 to 20 mm. long, the lobes linear or oblong, obtuse rarely some of the leaves entire, glandular on both surfaces; scapes 2 to 15 cm. high, viscid-pubescent, linear bracted or with 3 lobed leaves; flowers 1 to 6, calyx viscid, petals about 7 mm. long, spatulate. Cliffs and Rocky ledges particularly in dry, sunny places from Point Barrow to Disenchant ment Bay and reported from Sitka, thence southward to Oregon and Colorado, ~~thence~~ ^{and} across the continent ~~to~~ through the arctic regions to Labrador and Quebec. Widely distributed in arctic and alpine Europe and in Siberia. Type localities "in Alpibus Lapponicis, Helveticis, Tridentinis, Monspeliis."

~~Saxifraga~~ *S. sileneflora* Sturb. was described from Unalaska, Eschscholtz Bay and Chamisso Island, Alaskan material does not differ from European and Siberian material of ~~the~~

S. esposita

5632,

specimens except in being more densely matted and with shorter flowering stems than some. Though not all of the foreign specimens. In this respect, it is not different ~~than~~ ^{however} from other American material.

Arctic Alaska. - Point Barrow, Murdock, 1888. Cape Smyth, J. T. White, Aug. 5, 1894.

Seward Peninsula. - Port Clarence, F. A. Walpole, 1901 (No. 1853, 2060).
Lake Iliamna region. - near Lake Clark, German, 1912 (No. 310).
Alutian Chain. - Unalaska, J. B. Flitt,

1900 (No. 1786). B. W. Euermann, 1892 (No. 22).
Pofof Island, Harrington, 1871-72, Kirkaid,
July 85-19, 1899.

Kodiak Island and vicinity. - Sparce Island, Kellogg, 1867 (No. 112).

Alaska Peninsula. - Kukak Bay, Conille & Kearney (No. 1661).

Yakutat Bay. - Hainke Island, Disenchantment Bay, Conille & Kearney (No. 1107).

Laxifraga Lyalli Engler.

Laxifraga Lyalli Engler. Vish. Zool.-Bot. Ges. 19:
542. 1869.

Leaves flabelliform, glabrous, 2 to 5 cm.
long including the petiole, 1 to 3.5 cm. broad; ~~scapes glabrous~~, 4 to 20 cm. high, ^{panicle}
~~pedicels~~ ^{stamens} ~~glandular~~ usually five-flowered, calyx segments reflexed,
petals white. Moist places, usually on
shaded cliffs from Alaska Peninsula to
Juneau and ~~ranges~~ south ^{ward} to Washington and
northern Idaho. Type locality, Fort Colville,
Washington.

Alaska Peninsula.—Kuredeen Bay,
C. H. Townsend, July, 1890. Stipsavak Bay,
Palache, July 8 to 19, 1899.

Prince William Sound.—Port Weller,
Conville & Kearney (No. 1288).

Gakutat Bay.—Egg Island, Disenchant-
ment Bay, Conville & Kearney (No. 1012).

Southeastern Alaska.—Near Juneau, Grace
E. Cooley, Aug. 6, 1891. Sitka, Evans, 1897
(No. 188).

Saxifraga daurica Willd.

Willd. Sp. Pl. 2: 645, 1799.

Saxifraga daurica Willd. Sp. Pl. 2: 645, 1799.

1. This plant is apparently described by Pallas Reise 3: 731, t. Pl. f. 2, 1776 as *S. punctata* while *S. daurica* is given with the figure. From a footnote Pall. l.c. it is probable that his final conclusion was that the plant figured as *S. daurica* and to which he ^{on occasion} ~~had~~ ^{doubtfully} referred, ~~to~~ Pall. l.c. 444, as *S. nivalis* was in reality *S. punctata*.

(on a previous page)

cluding the petiole, 1 to 4 cm. broad, perianth usually very broad; scapes 4 to 15 cm. long or sometimes only 1 or 2 cm. long; calyx segments reflexed ^{at last} after anthesis, petals white or in dried specimens sometimes purple, mature follicles 6 to 8 mm. long. Moist, sandy or gravelly soil, usually on declivities, from Cape Lisburne ^{the mountains of} to the Alaskan Peninsula ^{and the Aleutian Islands} and Siberia from Dauria ^{the type locality} to Bering Sea. ~~Type locality~~ "in montibus sibiriae summis, nivatis et in angulo maxime orientali Asiae."

Seward Peninsula. - Port Clarence,
F. A. Walpole, 1901 (Nos. 1450, 1457).

Islands of Bering Sea. - Hall Island,
Comille & Kearney (No. 2080). St. Matthew Island,
Comille & Kearney (No. 2168).

Pribilof Islands. - St. George Island, J. M.
Macoun, July 16, 1892. St. Paul Island, C. H. Merri-
am, Aug. 8, 1891, Wm. Palmer, 1890 (Nos. ³⁰⁹ 348).

Alutian Chain. - Unalaska, Cuernmann,
1892 (No. 52). Poffaf Island, Kirkaid, July 25, 1899.

Alaska Peninsula. - Berendun Bay, C. H.
Lawson, 1890. Kukash Bay, Comille & Kearney
(No. 1664). Stefansk Bay, Palache, July 25, 1899.

Saxifraga tricuspidata Rottb.

Saxifraga tricuspidata Rottb. Schrift. Kieck. Selak.

10: 446, 1772.

Saxifraga chamissoi Stueb. Riv. Saxif. Suppl. 12.

5. 10. f. l.

Leaves sessile, 5 to 15 mm. long, oblong to cuneate-oblong or sometimes nearly linear, ciliate on the margin, the surfaces glabrous; flowering stems 6 to 20 cm. high, glabrous or sometimes sparingly glandular; inflorescence very much branched, calyx segments erect, petals yellow or yellowish ^{Some times with several brown spots near the apex} ~~whence~~ ^{conspicuously} exceeding the calyx; tips of the follicles slender. Cliffs and ~~steep de-~~ ^{clivities} rocky places from Kotzebue Sound to Juneau and the upper Yukon. Ranges southward in the Canadian Rockies, and through arctic America to Greenland, ~~and~~ ^{Southward to} ~~through to~~ ⁱⁿ Labrador and Lake Superior. Also in ~~the~~ ^{and also} arctic Europe. Originally described from

Arctic Alaska. ^{Valley of} ~~Moatah~~ ^{Moatah} River, G. M. Sweeney,
July 10-20, 1886.

Kayakuk River & vicinity. — Enos de Lage
and Kayakuk Rivers, Schrader, 1899. John
River, Schrader, July 12, 1901. Old Man Creek,
Mendenhall, July 8, 1901.

Lower Yukon. — Between Andreafski and
Anvik, I. C. Russell July 16-18, 1889.

Cook Inlet to Rampart City. — Kuchatno
Valley, Brooks & Pinnell ^{July 5,} 1902.

Coppar River region. ^{(W. L. Polo, 1912 (No. 54))}
Headwaters of the
Coppar and Tanana Rivers, Schrader and Hart-
man, 1902 (No. 47).

Upper Yukon. — Forty mile River, A. J. Collier,
1902 (Close 1902²²). Coal Creek Hill, Linston, 1893 (No. 87),
Fort Selkirk, Linnam, 1899 (No. 998). Lebarge Island,
Tarleton, 1899 (No. 42).

Yakutat Bay. — Liddon Glacier, Russell Fjord,
Canville & Kearney (No. 985).

Southeastern Alaska. — Skagway, Canville
& Kearney (No. 488). Near Juneau, Grace &
Cooly, Aug. 3, 1896.

Saxifraga comosa (Willd.) Britton.

Saxifraga stellaris comosa ~~Willd.~~ Willd. Sp. Pl.
21: 644. 1799.

Saxifraga comosa Britton, Minn. Terr. Bot. Club
5: 178. 1894.

as sometimes glabrous except the ciliate
Leaves usually hairy, ciliate on the
margin, 5 to 20 mm. long, cuneate entire
below the middle, cuneate at the base; scapes
usually slender, strictly erect, sparingly glandular;
calyx segments reflexed, about 1.5 mm. long,
petals white, usually with 2 yellow spots
near the base, sagittate or abruptly con-
tracted to the short claw. Moist places on
the tundra and dripping cliffs ~~to~~ from
Point Barrow to Seward Peninsula, ~~and~~ the
islands of Bering Sea. ^(and the Shumagin Islands) Ranges also through the
arctic regions ^{and ice} to Labrador and occurs in
Northern Europe and Asia. In the original
description the type locality is not given but
may be inferred from the citation "Fl. Lapp.
175. t. 2. f. 3."

Arctic Alaska. - Point Barrow, Murdoch, 1883

Seward Peninsula. - Port Clarence, Coville & Kearney
(No. 1965). 5 Miles north of Nome City, J. B. Felt, 1920 (No. 160).

Islands of Bering Sea. - St. Mathew Island, Coville & Kearney
(No. 2127). St. Lawrence Island, Coville & Kearney (No. 1992), J. M. Macoun,
Aug. 15, 1891.

Pribilof Islands. - St. George Island, C. H. Merriam Aug. 10, 1891.
Diomedean Islands. - Plover Island, C. H. Merriam Aug. 10, 1891.

(599)

Bongardi Presl.
~~Saxifraga nathana Moc.~~

Saxifraga stellaris brunoniana Bang. Mem. Acad.

Peters II. Math. & Nat. 2: 140, 1831.

Saxifraga bongardi Presl; Engelm. ~~Trans. Verh. Bot.~~ Bot. Soc. 19: 528, 1869.

Saxifraga nathana Moc.; Engelm. Mem. Saxif. 135, 1872.

Saxifraga bongardi Presl; Engelm. Mem. Saxif. 135, 1872.

usually

Leaves ^{usually} hairy on both surfaces, ~~or~~ sometimes glabrous, ^{cuneate or} oblanceolate or ~~cuneate~~ and tapering into a ~~broad~~ petiole, rarely abruptly, ^{coarsely} toothed, ~~at the apex~~ 1 to 7.5 cm. long, 3 to 15 mm. broad; scapes hairy, ^{erect} usually rather widely branched; calyx segments reflexed, 2.5 to 3 mm. long, petals ^{variable} white and sagittate or abruptly ^{and with 2 yellowish spots} contracted to the claw ^{or} ^{of thin, without 1/3 spots} or sometimes oblanceolate and tapering ^{at the base} white, with ~~2 yellow spots~~

Moist cliffs, springy places or rocky banks from Port Clarence to the southern boundary and reported to extend to Oregon. Type locality, Pitka.

S. bongardi is intermediate between S. stellaris of the Old World and S. michauxii of the southeastern United States, and has been referred to both of those species by various authors. It differs from the former in ^{leaves} ~~its~~ usually more hairy ^{scapes} and larger leaves and in ^{leaves} ~~some of its~~ petals ^{or} sagittate.

~~It differs from S. michauxii~~

S. michauxii usually has larger ^{coarser} toothed leaves, and more abruptly ^{commonly} contracted to the petiole, much larger and more numerous bracts in the inflorescence.

S. michauxii usually has ~~to~~ larger leaves which are more abruptly contracted to the petiole and ^{commonly} coarser toothed, much larger and more numerous bracts in the inflorescence, and in all the specimens examined ~~off~~ the flowers appeared to be quite constant in having 3 of the petals sagittate with 2 yellow spots near the base, and 2 petals narrowed at the base and without spots. In S. bangardi on the other hand all ~~are~~ the petals are sometimes sagittate and spotted, sometimes only one.

Seward Peninsula. - Port Clarence, Camille & Kearney (No. 1883).

Kodiak Island. - Brewer & Coe, 1899 (No. 170).

Prince William Sound. - Port Etches, J. M. Macoun, June 18, 1892. Orca, Kirkaid June 27, 1899. Columbia Field, Camille & Kearney (Nos. 1345, 1373, 1380). Port Wills, Camille & Kearney (No. 1259), Brewer & Coe, 1899 (No. 130).

Yakutat Bay. - 16 Miles north of Mission, Furston, 1892 (No. 60).

Southeastern Alaska. - Juneau, Camille & Kearney (Nos. 534, 2511), Grace E. Cooley, Aug. 6, 1891, Sitka, Bidchoff, 1865-66, Euermann, 1892 (No. 219), Evans, 1897 (No. 171), Camille & Kearney (Nos. 812, 902, 928). High mountains near Yes Bay, Sawell, 1895 (No. 162). Yes Bay, Lorman, 1895 (No. 14). Ratg Harbor, J. B. Flitt, 1901 (No. 1946).

Theropon Rafin.

66.

Perennial herbs with stout rootstocks and glandular-pubescent herbage; leaves rounded or uniform, dentate; flowers, ^{mostly} white, paniculate, petals 5, ~~stamens 5; ovary 2-lobed~~ or ~~very 3-lobed~~, styles 2, rarely 3; seeds numerous. About 5 species, ~~native~~ all North American.

Theropon Richardsonii (Hook.) Wheelock.
Saxifraga richardsonii Hook, Fl. Bor. Am. 1: 247.
1840 34.

Baykinia richardsonii Gray, Am. Journ. Sci. I.
42: 21, 1842.

Theropon richardsonii Wheelock, Bull. Torr.
Bot. Club 23: 70. 1876.

^{Shrub,} Stems, 15 to 40 cm. high; basal leaves long-petioled, orbicular-ovate, ^{or sometimes pinnate at the base} in ^{upper} ^{or} ^{short} lobes ^{to} ^{dentate}, ^{cauline} ^{leaves} ^{short} ^{petioled} ^{sessile} flabelliform or cuneate, deeply toothed, ^{short} ^{petioled} or ^{sessile}; panicle spike-like, flowers about 12 mm. long, the petals white or in dried specimens sometimes purplish at the base. Cape Lisburne to Seward Peninsula and in the interior to the Copper River region. Originally described from the ~~the~~ arctic sea-shore between the Mackenzie and Coppermine Rivers.

67

Seward Peninsula. - Port Clarence,
Camille + Kearney (No. 1906), F. A. Walpole, 1901
(Nos. 1550, 2033), 5 Miles north of Nome
City, J. B. Lett, 1900 (No. 1604).

Guns de Large + Kagukuk Rivers. - F. C.
Schrader, 1899.

Cook Inlet to Rampart City. - West side
of the Pass, Brooks and Pariddle, July 10,
1902.

Copper River region. - W. L. Peto, 1902
(No. 163).

Sparganiaceae Agardh.

Sparganium L. Bur-Reed.

Marsh or pond plants with linear, grass-like leaves and monocious flowers crowded in globose heads. About 10 species in the temperate and arctic regions of the Northern Hemisphere, in New Zealand, and in Australia.

Key to the Species.

Stigma linear or rarely oval, ~~not~~ raised on a distinct style; scale ob-
 obovate ^{to oblanceolate} denticulate, about 1 mm. broad.

S. simplex ~~angustifolium~~.

Stigma oval and oblique, nearly sessile; scale
 narrowly oblanceolate, rarely denticulate, about $\frac{1}{2}$ mm.
 broad.

S. hyperboreum.

Sparganium simplex Huds.

2,

Sparganium simplex Huds.

Represented in Alaska by the following ~~varia~~ subspecies.

Sparganium simplex angustifolium (Michx.) Engelm.

Sparganium angustifolium Michx. Fl. 2: 177, 1808.

Sparganium simplex angustifolium Engelm. in Sag. Man.

Fed. 5: 481, 1867.

Sparganium subvaginatum Minshausen, Bull. Acad. Sci. Petersb.

II, 361, 34, 1873.

A plant 20 to 50 cm. high; leaves 2 to 6 mm. broad; fruiting heads in dried Alaskan specimens 10 to 12 mm. in diameter. ^{usually floating, and not} ~~at Kodiak~~ ^{and ranging} it was found growing in a pond, ~~and it ranges~~ in Alaska.

S. subvaginatum was described from
"Finland, Archipelago Adoensi-Kranskor, pr Kelo
(Ruprecht); Dors. Sitcha (Mertens), Flora of the Rocky
Mountains, reg. alpinia (coll. C.C. Parry, also - *Sp.*
simplex var. *angustifolium* (Engelm.)."

Kodiak Island. - Kodiak, Coville & Kearney
(No. 2317 in part).

Prince William Sound. - Near Orea, Coville
& Kearney (No. 1321).

Sparganium hyperboreum Laest.

Sparganium hyperboreum Laest. in Wikstr. Arshrätt. 1850.

A plant usually smaller than the preceding,
 $\frac{15}{1.5} \times \frac{1}{2}$ to $\frac{30}{3}$ cm. high; the leaves 1 to 4 or even 6 mm.
 broad; ~~fruit frequent~~ ^{in dried specimens} fruiting heads, about 10 mm.
 in diameter, the fruit frequently having imperfect
 in having the lower half flattened. Usually
 found growing in bogs though occasionally
 floating. It is distributed in Alaska from
 Kotzebue Sound southward to Upernivik Bay, and
 has been collected in the Klondike Estuary, Yukon
 River, the southern shore of Hudson Bay,
 in Labrador and it has been reported from

Alutian Chain.—Popof Island, Kirkland, July 8-19
 1899.

Kodiak Island.—Kodiak, Camille & Kearney (No.
 2317 in part), Fernow (No. 3207), Trelease (No. 2861).

Alaska Peninsula.—Kukak Bay, Camille &
 Kearney (No. 1695).

Lake Iliamna Region.—Lake Iliamna,
 Farman, 1902. (No. 142).

Shark Bay, M. W. Gorman 1875 (No. 42), Wrangel,
W. H. Evans, 1877 (No. 44), New Metlakatla, Annette
Island, Conille & Kearney (No. 372). Kilm Bay, Clue-
land Peninsula ^{A. B. Little} 1901 (No. 1999).

Lloydia Salisb.

Stem simple, leafy, from a tunicated bulb; leaves
linear; style undivided. About 4 species in the
northern hemisphere.

Lloydia serotina (L.) ^{Sweet} Reichenb.

anthericum serotinum L. Sp. Pl. ed. 2. 1: 444, 1762.
Lloydia alpina Salisb. Trans. Hort. Soc. 1: 328. ^[2nd ed. 1830]
Lloydia serotina Reichenb. Fl. Exeuv. 1: 102, 1880.
Lloydia serotina Sweet, Hort. Brit. ed. 2. 527. Oct. 1830.
A small perennial herb with a small usually
oblique bulb; ~~and~~ flowers commonly one, sometimes
two; perianth segments whitish with brown-
purple veins; ~~the~~ seeds oblong. Arctic or alpine from
Cape Lisburn, and the islands of Bering Sea to Un-
laska Thence ^{south} eastward to Chilkoot Inlet and
southward in the interior in the ^{Rocky} Mountains to
northern New Mexico, the Blue Mountains of
Oregon and the Clower ~~Mts.~~ Mountains in
Nevada. It occurs also in Europe and Asia
and was originally described from England.

Santalaceae R. Br.

Comandra Nutt.

Herbs with alternate leaves and terminal or axillary inflorescence; base of the calyx adnate to the ovary, its limb 5-lobed, rarely 4-lobed, persistent, crowning the mature fruit; stamens 5, rarely 4, opposite the calyx-lobes; fruit drupaceous. Four species in Europe and North America.

Comandra livida Richards.

Comandra livida Richards, App. Frankl. Journ.
794, 1823.

Stems 10 to 30 cm. high, simple or branched from ^{near} the base; leaves oval, rounded at the apex, narrowed at the base, usually 15 to ³⁰~~40~~ mm. long, 5 to 15 mm. broad; inflorescence axillary, cymes two flowered, peduncle shorter than its subtending leaf; drupe red. Along the coast from Cook Inlet to the Southern Boundary and in the interior from the mouth of the Tanana River through and the upper Yukon valley, thence to Hudson Bay and Newfoundland and south to British Columbia, Michigan, Ontario and Vermont. Originally described from the North West Territories latitude 54° to 64°.

Cook Inlet. — Near Hope City, W. H. Clogwood Sept.
1920. Kasilof, W. H. Evans, 1898 (No. 633).

Southeastern Alaska. — Gies Bay, M. W. Gorman,
1895 (No. 20), Thomas Kendall, 1895 (No. 1660.)

Yukon Valley. — Where near the mouth of the
Tanana, C. C. Ferguson, 1920 (No. 32). Rampart, Isaac
Jones, 1911 (No. 34).

Upper Yukon valley. — Forty Mile Creek, Frederick
Lunstan, 1893 (No. 52). Ingersoll Islands, M. W.
Gorman, 1899 (No. 994). Lake Bennett, J. B. Farle-
ton, 1899 (No. 18).

3
Scheuchzeriaceae Agarth.

Key to the Genera.

Leaves basal; flowers numerous, born on a naked scape, their pedicels not subtended by bracts. Triglochin.

Leaves both basal and cauline; flowers few, born on a leafy stem, their pedicels subtended by bracts or reduced leaves. Scheuchzeria.

Triglochin L.

A genus of about 9 species, occurring in marshes in nearly all parts of the world.

Key to the Species.

Carpels 3; fruit clavate, attenuate ^{at} the base, about 8 mm. long at maturity. T. palustre.

Carpels 6; fruit oblong or ovoid, obtuse at the base, about 4 mm. long at maturity. T. maritima.

Triglochin palustris L.*Triglochin palustris* L. Sp. Pl. 1: 338, 1753.
1 to 3.5 dm. high

A plant, with rather slender leaves and scape, inhabiting fresh-water bogs and ranging in Alaska from Chitkaot Inlet to Unalaska and St Michael. It occurs also in the Yukon Valley in the vicinity of Fort Selkirk and White River and ranges ^{southwest} through Canada to New Brunswick, south to Montana, Indiana and New York in the United States. It occurs also in Europe, where it was originally described, and in Asia.

Alaska, without special locality, Walter H. Evans, 1897 (No. 446).

Kussiloff, Walter H. Evans, 1898 (No. 669).

Kukak Bay, Canille and Kearney (No. 1558).

Kadiak, Canille and Kearney (No. 2324).

Popof Island, Shumagin Islands, Saunders July 7-18, 1899.

Unalaska, J. B. Lott, 1900 (No. 1508).

St. Michaels, Nelson 1877.

Above Fort Selkirk, Yukon Territory, J. B. Tarleton, 1899 (No. 102).

White River, Yukon valley, M. W. Gorman, 1899 (No. 1123).

Triglochin maritima L.*Triglochin maritima* L. Sp. Pl. 11 239, 1753.

Frequently varying considerably in size, ranging from 1 to 7.5 dm. in height; the scape usually stout. *T. maritima* occurs in brackish meadows along the coast from ~~Sitka~~ Behm Canal to the Shumagin Islands in the Aleutian chain. It occurs also at Seabarge Island and White River in the Yukon Valley and in fresh or saline marshes throughout Canada to Labrador and south to New Jersey and California in the United States. It is common in South America, ^{where it was originally described,} in Europe, and in Asia.

- 141).
 Alaska, without special locality, Walter H. Evans, 1897 (No. 141).
 Yes Bay on Behm Canal, M. W. Parman, 1895 (No. 63½).
 Sitka, Coville and Kearney (No. 849).
 Port Chester, the Albatross [C. H. Townsend].
 Faggy Bay, near Cape Fox, Coville and Kearney (No. 2562).
 Kussiloff, Walter H. Evans, 1898 (No. ~~777~~ 689).
 Sturgeon River, Kodiak Island, Coville and Kearney (No. 2256).

4

Schenckgeria L.

A monotypic genus of the North Temperate zone.

Schenckgeria palustris L.

Schenckgeria palustris L. Sp. Pl. 1: 338, 1753.

A rush-like perennial with creeping rootstock, usually found growing in bogs. Collected in Alaska at Spacious Bay and occurs rather rarely from New Brunswick to Hudson's Bay thence southward to Washington and California, and south in the eastern United States to New Jersey.

Spacious Bay, Thos. Samell, 1795 (No. 168);
M. W. Garman, 1895 (No. 144).