



Follicles of fruit.



A. delphinifolium ssp. *delphinifolium*



A. delphinifolium ssp. *paradoxum*

Aconitum delphinifolium

Family: Ranunculaceae

Common name: Monkshood

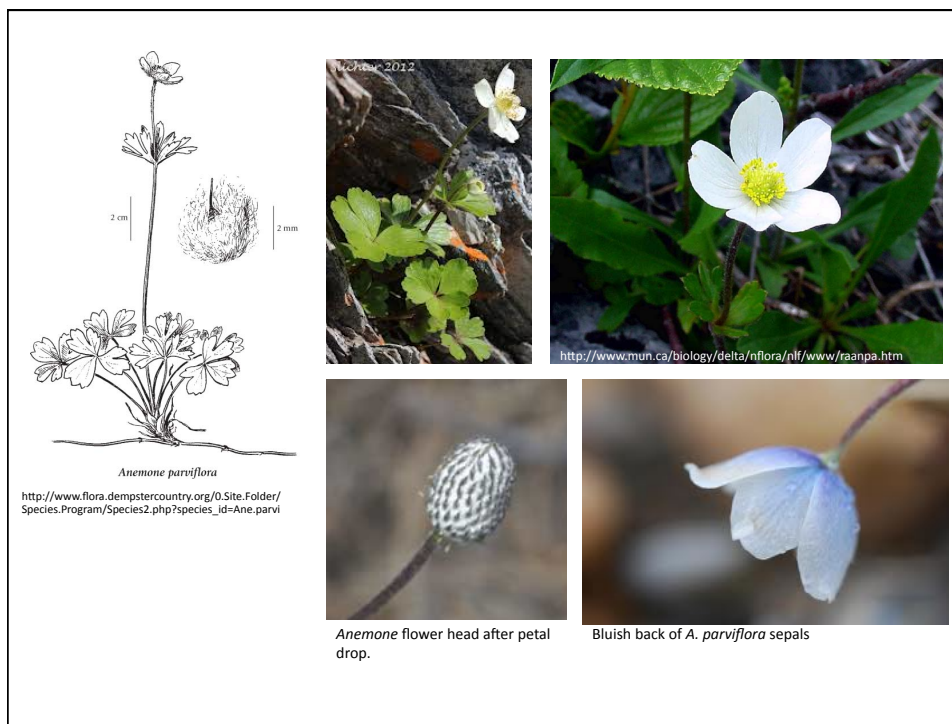
Growth form: Erect forb, from stout fleshy rhizome. *A. delphinifolium* ssp. *delphinifolium* is taller (30-100 cm) and several flowered; whereas ssp. *paradoxum* is smaller and single flowered.

Leaves: Mostly alternate, few, palmately lobed, long petioled, and deeply cleft.

Flowers: Open raceme with few (3-5), purple or deep blue, irregular flowers, *upper sepal (galea) is hooded*.

Fruit: Aggregate of 3 follicles hooked at apex.

Habitat: Moist meadows. Amphi-Beringian species. Poisonous alkaloid compounds.



Anemone parviflora

Family: Ranunculaceae

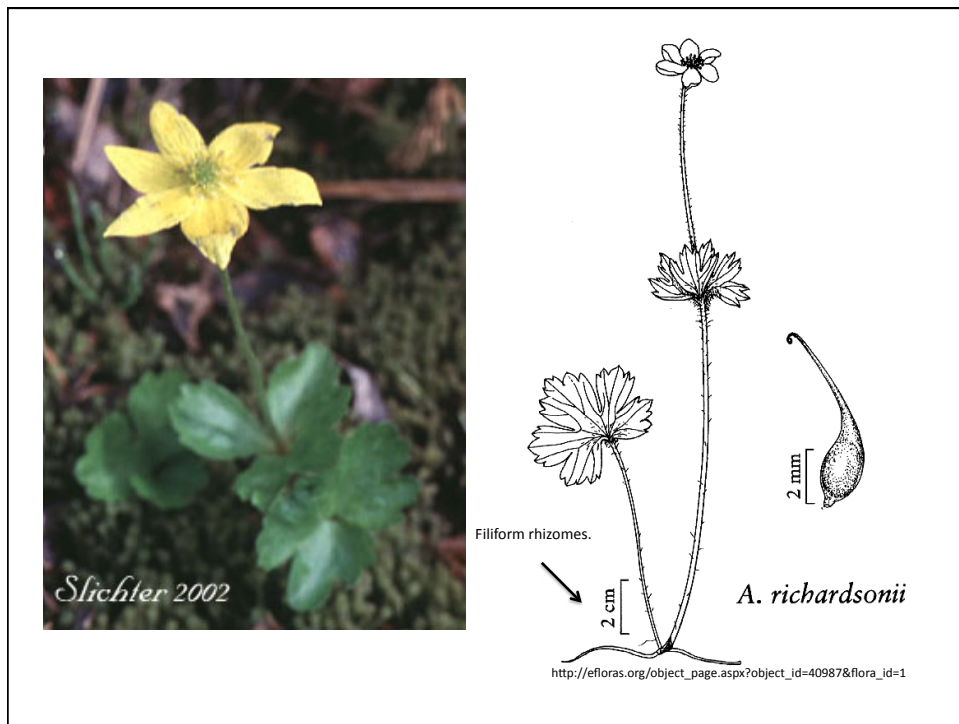
Common name: Small-flowered Anemone

Leaves: Dark green lustrous. Lobes bluntly toothed.

Flowers: Single, usually 6 sepals. Petals white tinged with blue beneath.

Fruiting head: Spherical, densely wooly, with aggregation of achenes

Habitat: Moist tundra, streamsides.



Anemone richardsonii

Family: Ranunculaceae

Common name: Richardson's Anemone

Compared to *A. parviflora*:

- Similar but smaller leaves, more sharply toothed
- Yellow flower.
- Much smaller than *A. parviflora* (5-20 cm tall).
- Filiform rhizomes.
- Hook apex on achenes.



Boschniakia rossica

Family: Orobanchaceae

Common name: Boschniakia

Growth form: Herbaceous root parasite.

Stem: Glabrous, club like from short thick base that is attached to host plant.

Leaves: Alternate scales, ovate to triangular, yellowish to purplish.

Inflorescence: longer than stem, many flowered raceme.

Flowers: Many, irregularly lobed or toothed, corolla purplish.

Fruit: Capsule, irregularly dehiscent.

Habitat: Parasitic on roots of *Alnus viridis*.



Caltha palustris

Family: Ranunculaceae

Common name: Marsh Marigold

Stems: Soft stout, glabrous.

Leaves: Simple, oval-cordate. Basal leaves long-petioled, up to 6 cm wide; stem leaves short petioled to sessile.

Flowers: Terminal, 5 yellow sepals, no petals, with central mass of yellow stamens.

Fruit: 10-12 appressed-ascending follicles with beaks bent.



Potentilla palustris

(*Comarum palustre*)

Family: Rosaceae

Common name: Marsh fivefinger

Growth form: Emergent aquatic forb with branching prostrate and submerged rhizomes

Leaves: Compound, 5-7 pinnate, leaflets oblong lanceolate, sharply serrate.

Flowers: about 2cm diam. Petals shorter than sepals, dark reddish purple, anthers deep purple.

Habitat: Aquatic marshes and bogs.



Delphinium glaucum

Family: Ranunculaceae

Common name: Larkspur

Compared to *Aconitum delphinifolium*:

- Much taller plant, 50 cm or more.
- Leaves similar.
- Racemes with many more flowers than *A. delphinifolium*.
- Flowers similar color to *A. delphinifolium*, but no hood, and upper sepal prolonged backward into a long spur.



New shoot. http://www.heilpflanzen-suchmaschine.de/weidenroeschen/weidenroeschen_bilder.shtml



<http://images.google.com/ur?q=http://www.bioclit.ca/plantes/>



Dehiscent capsules with hairy seeds. <http://hawthorn.csse.monash.edu.au/~njh/holidays/uist-2002/20021018/>

Epilobium angustifolium

(= *Chamerion angustifolium*)

Family: Onagraceae

Common name: Fireweed

- **Growth form:** Tall (up to 1 m) erect perennial forb.
- **Leaves:** Alternate, lanceolate simple with pinnate venation.
- **Inflorescence:** Many flowered raceme, elongating in maturity.
- **Flowers:** Large 4 prominent narrowly lanceolate sepals, petals 4 rose pink, 10-12 mm.
- **Fruit:** Capsule 4-10 cm long, pubescent.
- **Habitat:** Pioneer species on disturbed sites. Often spectacular displays for few years following fire.



Epilobium latifolium
(= *Chamerion latifolium*)

Family: Onagraceae

Common name: River Beauty

Growth form: Perennial erect forb, 4-10 cm tall.

Leaves: Opposite, broadly lanceolate, fleshy, simple.

Inflorescence: Distinct from *E. angustifolium*, few flowered raceme, not elongating in maturity.

Flowers: Much larger than *E. angustifolium*, 4 prominent narrowly lanceolate sepals 10-24 mm, petals 4 rose pink, 15-30 mm.

Fruit: Capsule 3-10 cm long, glabrate.

Habitat: Frequent pioneering species on gravel river bars and stream banks.



Galium boreale

Family: Rubiaceae

Common name: Northern bedstraw

Growth form: Erect forb. Perennial mostly 20-80 cm tall, with numerous erect stems from well-developed, creeping rhizomes.

Stems: 4 sided.

Leaves: whorled in fours, stalkless, hairless or rough, lanceolate or nearly linear, blunt to pointed with minutely rounded tip.

Flowers: numerous in terminal, rather showy, repeatedly 3-forked clusters. Corollas white or slightly creamy, 3.5-7 mm wide, with 4 spreading lobes which are separate almost to the base.

Habitat: Dry to moist, often pioneer on disturbed sites. Edible foliage.



Geocaulon lividum

Family: Santalaceae

Common name: Northern Comandra

Growth form: Erect forb, 10-30 cm tall. Parasitic.

Leaves: short petioled, oval, narrowed at base, sometimes variegated green and yellow.

Flowers: 2-4 in axillary cymes, usually only middle flower fertile.

Fruit: globose, fleshy orange, with central seed, edible.

Habitat: Mossy *Picea glauca* forests and *Populus tremuloides* forests.



Koenigia islandica

Family: Polygonaceae

Common name: Iceland purslane

Growth form: Very small erect annual forb. Among the smallest terrestrial flowering plants.

Stem: Slender branched, reddish, with few leaves

Leaves: Few, alternate, obovate, fleshy, often reddish purple.

Inflorescence: Small terminal clusters, subtended by leaf-like bracts.

Flowers: Corolla white.

Fruit: Achenes, 3 angled.

Habitat: Wet sites in moss or mineral soil, often sites with frequent disturbance.



Oxyria digyna

Family: Polygonaceae

Common name: Mountain Sorrel

Growth form: Perennial forb, short rhizome.

Stem: Fleshy flowering stem with few leaves.

Leaves: Mostly basal, simple, alternate, long-petioled, reniform (kidney shaped).

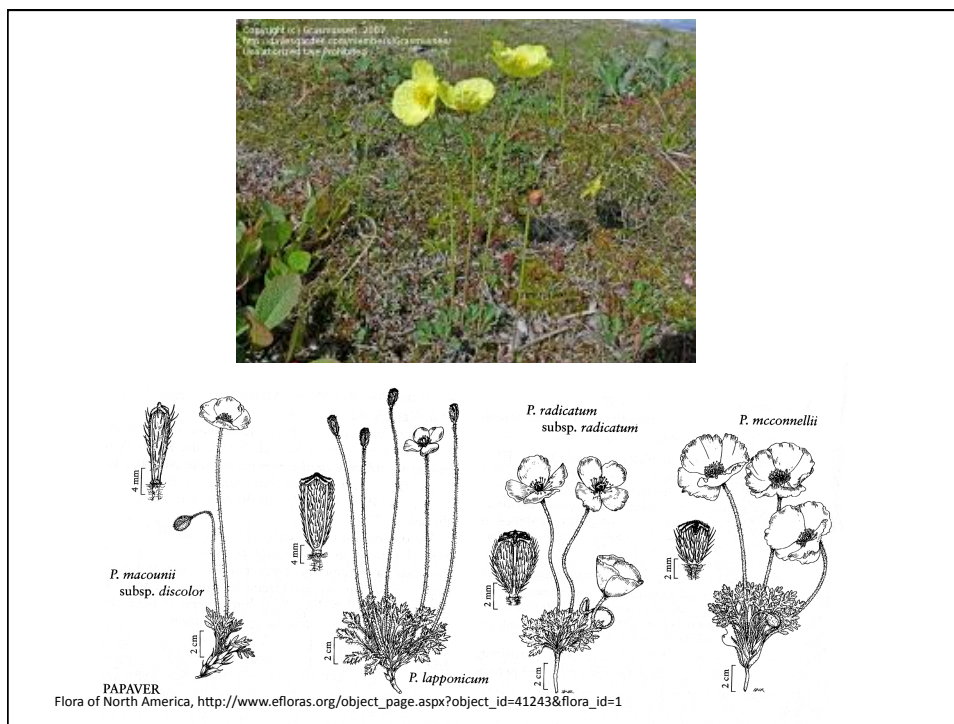
Inflorescence: Panicles of many flowers.

Flowers:

Fruit: Achenes, reddish wing-margined.

Habitat: Moist tundra, common in late snowbeds.

Succulent herb with lemony flavor due to oxalic acid.



Papaver macounii

Family: Papaveraceae

Common name: Macoun's Poppy

Growth form: Loosely caespitose erect forb.

Leaves: Green, long petioled, oblong-ovate, pinnate, pubescent to nearly glabrous.

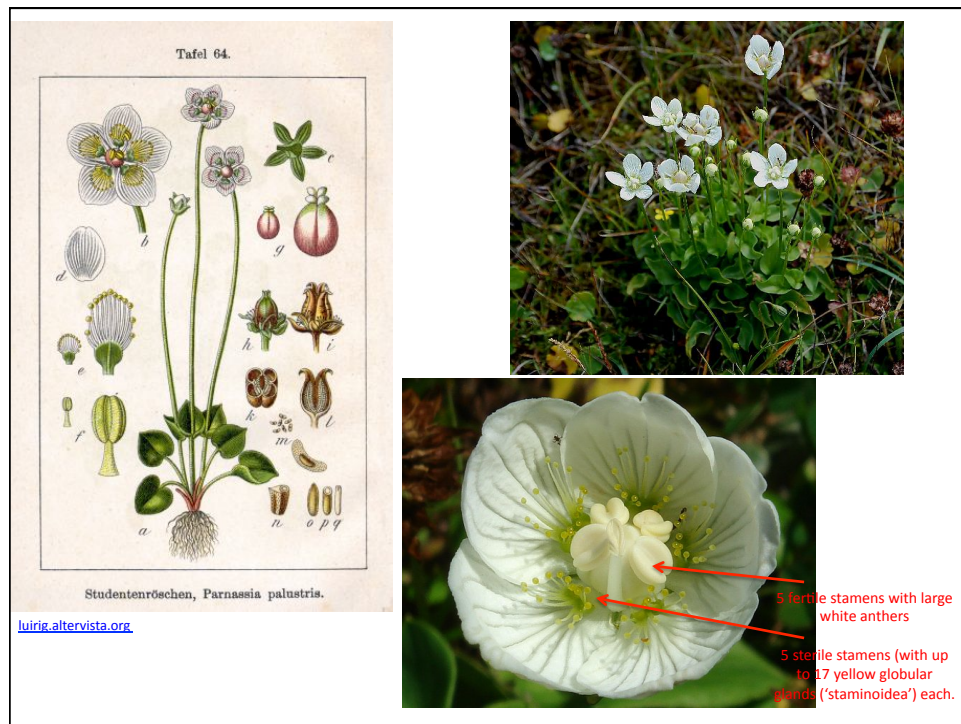
Inflorescence: Single flower on long solitary scapes, 25 cm or more long.

Flowers: Showy, large (4-6 cm diam.), yellow, sepals 2, petals 4.

Fruit: Capsule more than 4x tall as broad.

Habitat: Mesic nonacidic tundra.

Notes: *Papaver* is a morphological and genetically difficult genus that although extensively studied is still considered the "most messy of all the large Arctic genera" (Elven 2006). Most arctic species are keyed out by hairiness of the leaves, and size and shape of the capsule.



Parnassia palustris

Family: Saxifragaceae

Common name: Marsh grass of parnassus

Growth form: Erect forb, 10-45 cm tall. **Leaves:** Ace-of-spades shaped, long petioled basal leaves. short petioled, oval, narrowed at base, sometimes variegated green and yellow. Single leafy bract on lower part of scape.

Flowers: 5 white, deeply folded petals, twice as long as sepals, 7-9 vein-like folds. 7-15 staminoidea per sterile stamen fascicle, alternating with larger fertile stamens.

Fruit: Central globose capsule that dehisces at the top, releasing very small seeds.

Habitat: moist to wet meadows.



Polygonum plumosa

(= *Polygonum bistorta* ssp. *plumosa*,
Bistorta plumosa)

Family: Polygonaceae

Common name: Bistort

Growth form: Perennial forb, with thick hard contorted rhizome.

Leaves: Mostly basal, elliptic, elongated, dark green above, grayish beneath

Inflorescence: Thick spike of deep pink flowers

Fruit: Achenes, reddish wing-margined.

Habitat: Moist peaty tundra, common forb in moist acidic and nonacidic tundra.

Leaves and roots are edible.



<http://www.plant-identification.co.uk/skye/polygonaceae/polygonum-viviparum.htm>



<http://gastein-im-bild.info/bild/bppolyvy.html>



<http://gastein-im-bild.info/bild/bppolyvy.html>

Polygonum viviparum

(= *Bistorta vivipara*)

Family: Polygonaceae

Common name: Viviparous Knotweed,
Alpine bistort

Growth form: Generally small perennial forb, with starchy rhizome, terminating in a cluster of leaves.

Leaves: Lanceolate or oblong lanceolate, basal, elliptic, elongated, lustrous dark green above, grayish beneath.

Inflorescence: Terminal spike of 2-10 cm long, Lower most flowers replaced by bulbils that often germinate on the plant (viviparous). Flowers on upper half of spike are white or pale pink, normally sterile.

Habitat: Moist peaty tundra, common forb nonacidic tundra.
Leaves and roots are edible.



Black hairy sepals.
<http://www.luontoportti.com/suomi/en/kukkakasvit/snow-buttercup>



http://www.volv.no/bilder/galleri/fjellplanter/ranunculus_nivalis.htm



http://honeybee.helsinki.fi/USERS/KORPELA/ranunculus_nivalis.html

Ranunculus nivalis

Family: Ranunculaceae

Common name: Snow Buttercup

Growth form: Erect forb. Small 5-10 cm tall.

Leaves: Basal leaves long petioled, blades reniform, deeply 3 lobed. Stem leaves deeply cleft to base, lobes narrowly spatulate-elliptic, clasping the scape.

Flowers: 1.5-2.5 cm diam. Flowers of *Ranunculus* have both sepals and petals. Sepals of *R. nivalis* densely black hairy. Petals 5 dark yellow shiny.

Habitat: Wet sites near streams, often near margins of melting snowbanks.



Rumex arcticus

Family: Polygonaceae

Common name: Arctic Dock

Growth form: Taller (30-100 cm) erect forb, from stout fleshy rhizome.

Leaves: Mostly basal, dark green, somewhat fleshy, oblong to narrowly lanceolate, simple, alternate.

Inflorescence: Simple or short branched panicles of small reddish flowers.

Fruit: Achenes, reddish wing-margined.

Habitat: common on disturbed sites in moist tundra.



Saxifraga bronchialis

Family: Saxifragaceae

Common name: Yellow-spotted
saxifrage

Growth form: Erect forb, 10-30 cm tall. Parasitic.

Leaves: Dense basal rosette of imbricate leaves without petioles. Leaves elliptic to spatulate, white-ciliated margins, and acute tip; stem leaves smaller, more linear.

Flowers: White petals, with yellow (or purplish) spots.

Fruit: Follicles oblong with divergent beaks. .

Habitat: Rocky crevices, alpine tundra, not on calcareous soils.



Saxifraga cernua

Family: Saxifragaceae

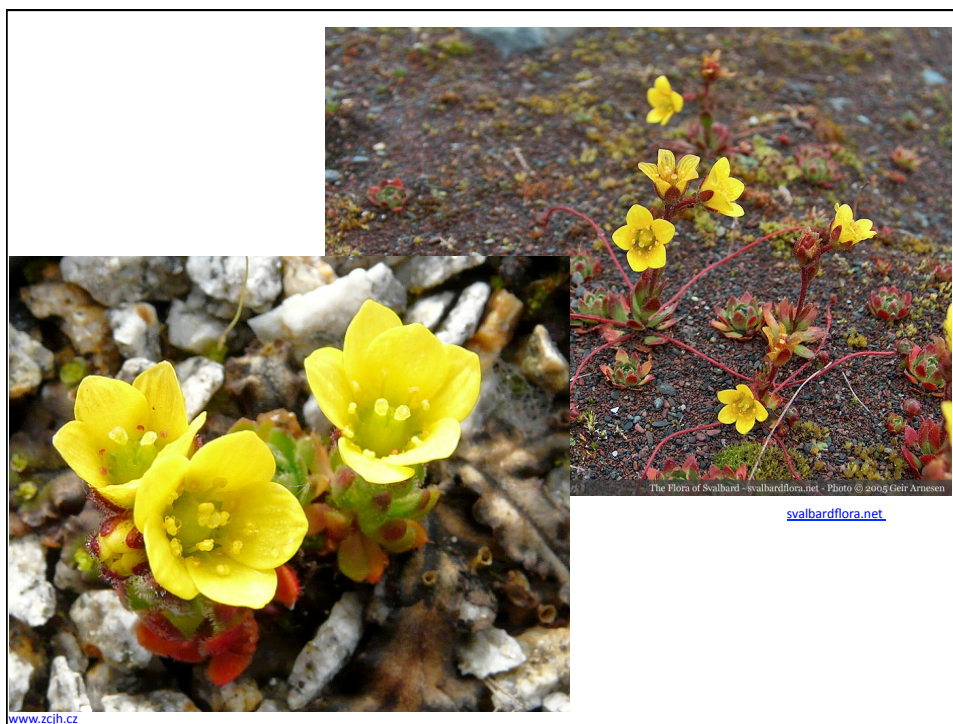
Common name: Bulblet saxifrage

Growth form: Delicate erect forb, 10-25 cm tall.

Leaves: Basal and lower stem leaves petioled, 3-5 lobed, reniform; stem leaves smaller, more bract like, subtending groups of *small purple bulblets in the axils of the leaves*.

Flowers: Mostly single; petals white, about 4 times as long as the sepals. Rarely developing capsules.

Habitat: Moist tundra, and moist sites in the mountains, characteristic taxon for moist coastal tundra.



Saxifraga flagellaris

Family: Saxifragaceae

Common name: Spiderplant

Growth form: Rosette forb with *long flagellate naked stolons terminating in a rooting offset*. Flowering stem 3-15 cm tall. Leafy, glandular pubescent.

Leaves: Several stem leaves, setose-ciliate, often glandular pubescent. Basal leaves entire, cuneate-oblongate, mucronate, ciliate with coarse spiny cilia.

Flowers: Yellow, no spots on petals.

Habitat: Alpine sites, rocky soils or extreme sites in high arctic.



Saxifraga hirculus

Family: Saxifragaceae

Common name: Bog saxifrage

Growth form: Small erect forb, 2-25 cm tall.

Flowering stem: Reddish, pubescent with curly septate reddish hairs.

Leaves: Basal leaves linear-oblongate to spatulate, glabrous. Stem leaves 3-7 sessile more linear, smaller.

Flowers: Usually solitary, at first nodding; sepals red, spreading at anthesis, deflexed in fruit stage. Petals bright yellow, often with orange dots on lower half of petals.

Fruit: Red capsule with numerous seeds.

Habitat: Moist to wet mossy usually acidic places, tundras.



Saxifraga oppositifolia

Family: Saxifragaceae

Common name: Purple mountain saxifrage

Growth form: Densely matted mat forb, with mass of trailing branches, single purple flower at the end branches.

Leaves: Opposite and imbricated, 4 ranked. Small (2-4mm), scale-like, oblong to obovate, leathery, bristly ciliate.

Flowers: Dark purple but quickly fading to pink.

Habitat: Moist to dry calcaeous soils and gravels, and cliffs.



Saxifraga punctata* ssp. *nelsoniana

(=*Saxifraga nelsoniana*)

Family: Saxifragaceae

Common name: Cordate leaved saxifrage, Brook saxifrage

Growth form: Erect forb, 5-50 cm tall.

Flowering stem: Stout, reddish, pubescent to glandular-pubescent

Leaves: Basal leaves pubescent both sides and ciliate with septate hairs, rounded to reniform, cordate, toothed. Petioles at least twice as long as diameter of blades.

Inflorescence: Compact to open panicle.

Flowers: Few to many in; sepals ovate to lance-ovate, 1-2 mm long, reflexed; petals white or pink, twice as long as calyx lobes..

Fruit: Capsule 3-6 mm long..

Habitat: Moist to wet mossy usually acidic places, tundras.



Saxifraga tricuspidata

Family: Saxifragaceae

Common name: Prickly saxifrage or
three-toothed saxifrage

Growth form: Densely matted forb; stems 6-15 cm tall.

Flowering stems: Leafy, sparsely glandular pubescent.

Leaves: In densely crowded rosettes, rigid, leathery, cuneate-spatulate, setose-ciliate, with 3 prickly toothlike lobes at apex.

Inflorescence: Corymbose; branches glandular-pubescent.

Flowers: Petals creamy white, usually orange dotted in upper part, yellow dots in lower part. **Fruit:** Red capsule with numerous seeds.

Habitat: Dry sandy and rocky tundras, crevices, ridges, common in the mountains.