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CONTRIBUTIONS TOWARD A FLORA OF NEVADA, NO. 36.
PORTULACACEAE OF NEVADA X
by
Arthur H. Holmgren
May 4, 1955

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LEWISIA REDIVIVA Purch "Bitter root" About natural size. From a water color by Helen Joslin

### Errata for

Contribution Toward A Flora of Nevada, No. 35

# Capparidaceae of Nevada

page	line	for	read
2	up 8	imbricate	convolute
7	12	0.3-1.1 mm.	3-11 mm.
10	up 7	to those to	to those of
16	3	5-9 mm.	5-9 mm. long.
18	11	1852	1850
20	up 10	mm. tall	cm. tall

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#### PORTULACACEAE OF NEVADA

#### By Arthur H. Holmgren\*

#### May 4, 1955

#### Contributions Toward a Flora of Nevada, No. 36

Flowers cymose, racemose, or solitary, regular but unsymmetrical by virtue of the sepals being fewer than the petals in most instances; sepals commonly 2, sometimes 4-8; petals mostly 5, rarely wanting or as few as 3 or as many as 16, separate or slightly united at the base, usually hypogynous; stamens 3-20, rarely 35-50, opposite the petals when of the same number and adnate to them at the base; ovary superior or partly inferior, one-celled or somewhat 3-locular in <u>Talinum</u>; seeds 1 to many on a free central placenta, with copious endosperm; styles 2-8-cleft or distinct, the branches introrsely stigmatic; fruit a circumscissile or longitudinally dehiscent capsule; annual or perennial herbs, rarely suffrutescent or woody, with or without stipules; leaves succulent, simple entire, alternate, opposite or basal.

A family of 16-20 genera and more than 500 species distributed widely throughout western North America and southern South America and in other parts of the world. Several species of <u>Lewisia</u>, <u>Talinum</u>, and <u>Portulaca grandiflora</u> are among the ornamentals most commonly selected from this family.

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#### KEY TO GENERA

Capsule 2-3-valved, dehiscing from the summit.

Style 1, stigmas 2; capsule dehiscent by 2 valves; flowers in scorpioid spikes or spike-like panicles.

Style long, filiform; petals withering around the style.

Styles 3, united at base, free at apex; capsule dehiscent by 3 valves.

Plants from thick roots or corms; ovules 6, sometimes only 3. 3. CLAYTONIA

Plants from fibrous roots; ovules 2 or 3. . . 4. MONTIA Capsule circumscissile.

#### 1. SPRAGUEA Torr.

Flowers in scorpioid spikes arranged in umbels, heads or panicles; sepals 2, scarious, accrescent, persistent; petals 4, unequal, withering around the style; stamens 3, opposite the larger petals; styles long-filiform, 2-cleft at the apex; capsule 2-valved, 1-8seeded. Annual or perennial succulent herbs from a taproot; leaves mostly basal, crowded, stem leaves much reduced and scale-like.



(Named in honor of Isaac Sprague, American botanical illustrator.) Two species, one in Nevada.

1. SPRAGUEA UMBELLATA Torr., Smiths, Contr. 6: 4, pl. 1. 1853.

<u>Spraguea paniculata</u> Kell., Proc. Calif. Acad. 2: 187. 1863. <u>Spraguea umbellata</u> var. <u>montana</u> Jones, Bull. Torrey Club 9: 31. 1882. <u>Calyptridium nudum</u> Greene, Pittonia 1: 64. 1887. <u>Spraguea eximia</u> Eastw., Bull. Torrey Club 30: 486. 1903. <u>Spraguea caespitosa</u> Rydb., N. Amer. Fl. 21: 318. 1932. Spraguea hallii Rydb., 1. c.

A highly variable species, usually with the appearance of a perennial; stems several, spreading, 5-45 cm. high; leaves spatulate, 1.5-8 cm. long, mostly basal, cauline leaves reduced, often wanting; inflorescence various, spikes borne in umbels, these often very irregular or head-like clusters; flowers white to pink, crowded; sepals white to pink, scarious, accrescent, often becoming 7-8 mm. long; petals 4, 3-8 mm. long; stamens 3, exserted, opposite the larger petals; capsule ovate, 3-4 mm. high.

Usually in sandy soil in the mountains. British Columbia to California and the Rocky Mountains. Nevada material seen from Elko, Mineral, Nye and Washoe Counties.

Var. CAUDICIFERA A. Gray, Syn. Fl. N. Amer. 1: 278. 1897.

Spraguea multiceps Howell, Erythea 1: 39. 1893.

A dwarf and depressed perennial with a branching caudex; leaves thick, 0.5-2.0 cm. long; inflorescence in dense heads. Alpine areas throughout the range of the species.

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#### 2. CALYPTRIDIUM Nutt.

Flowers in scorpioid spikes or panicles; sepals 2, broad, unequal, scarious or scarious-margined, accrescent, persistent; petals 2-4, small, somewhat coherent above and carried up on the elongating capsule; stamens 1-3; style simple, stigmas 2; capsule 2-valved, flat, hyaline. Low, annual, more or less succulent herbs with several to many leaves in a basal rosette and a few alternate cauline leaves. (Greek, a calyptre or covering, referring to the petals.)

Five species, three in Nevada.

#### KEY TO SPECIES

Sepals exceeding the mature capsule, valves widest near the base;

flowers pedicellate or subsessile. . . . . l. C. ROSEUM Sepals shorter than the mature capsule, valves widest near the middle; flowers sessile or subsessile.

Capsule linear, more than twice as long as the sepals.

2. C. MONANDRUM

Capsule oblong, about twice as long as the sepals. 3. C. PARRYI

1. CALYPTRIDIUM ROSEUM S. Wats., Bot. King Expl. 44. 1871.

Diffuse branching annual with depressed stems up to 10 cm. long; leaves alternate, spatulate, 1-5 cm. long; inflorescence paniculate in axillary and terminal scorpioid clusters; sepals unequal, often reddish, scarious-margined, the outer orbicular, the inner ovate, 2-4 mm. long; petals 2, minute, less than 1 mm. long; stamens 1; capsule nearly equaling the sepals.

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Sandy soil from 4,000 to 12,000 ft. Eastern Oregon to eastern California and Wyoming. Nevada material seen from Mineral County.

### CALYPTRIDIUM MONANDRUM Nutt. in Torr. & Gray, Fl. N. Amer. 1: 198. 1883.

Branched and spreading annual with stems up to 15 cm. long; leaves mostly basal, spatulate, 1-5 cm. long, cauline leaves alternate, few; inflorescence paniculate with spike-like branches that are scorpioid toward the apex; sepals unequal, scarious-margined, 1-2 mm. long; petals usually 3, occasionally 2, white, 1 mm. long; stamen 1; capsule linear, falcate, 4-6 mm. long.

Sandy soil. California to Mexico, Arizona and Nevada. Nevada material seen from Clark (Mica Springs, M. E. Jones), Mineral and Washoe Counties.

3. CALYPTRIDIUM PARRYI A. Gray, Proc. Amer. Acad. 22: 285. 1887.

Branched and spreading annual with stems up to 15 cm. long; basal leaves numerous, spatulate, 2-3 cm. long, cauline leaves alternate and considerably smaller; inflorescence paniculate, few-flowered, with spike-like branches that are scorpioid towards the apex; sepals unequal, with scarious margins, 3-4 mm. long on fruiting specimens; petals 3 or 4, white, nearly same length as the sepals; stamens usually 2; capsule oblong, about twice as long as the sepals.

Sandy soil, California to Arizona and western Nevada. Gold Mountain, Esmeralda County, Nevada (Keck No. 559).

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#### 3. CLAYTONIA L.

Flowers in terminal racemes; sepals 2, persistent; petals 5-6, distinct, white to rose; stamens 5, opposite the petals and adnate to them at the base; style 3-cleft; capsule 3-valved, 6-seeded, rarely less. Perennial herbs from fleshy roots or deep corms; basal leaves 1 to many, sometimes absent, cauline leaves 2, opposite. (John Clayton, American botanist of the 18th Century.)

A genus of about fifteen species, three in Nevada.

#### KEY TO SPECIES

# 1. CLAYTONIA MEGARRHIZA (A. Gray) Parry, S. Wats. Bibl. Ind. 118. 1878.

Claytonia bellidifolia Rydb., N. Amer. Fl. 21: 301. 1932.

Perennial from a deep taproot; stems several, 2-10 cm. high; basal leaves numerous, 3-10 cm. long, with from 1-7 ribs running into the petiole, cauline leaves linear to oblanceolate; inflorescence corymbiform; sepals broadly ovate, 4-7 mm. long; petals white to pale pink, clawed at the base, 5-10 mm. long; stamens 5; capsule ovoid, 4-6 mm. long. · · ·

Rocky ridges or talus slopes at high elevations. Washington and Alberta; south to California, Utah and northern New Mexico. Nevada material seen from Jarbidge Mountains, Elko County (Maguire & Holmgren No. 22279).

# CLAYTONIA UMBELLATA S. Wats., Bot. King Expl. 43. 1871. <u>Claytonia obovata Rydb.</u>, N. Amer. Fl. 21: 299. 1932.

Perennial from a fusiform to globose corm, 1-2.5 cm. thick; basal leaf thick, elliptic to rhombic-ovate, often lacking on flowering plants, cauline leaves opposite, the blade equaling the petiole, 3nerved, 1.5-2.5 cm. long; flowers 3-5, subumbellate; sepals oval, 4-5 mm. long; petals obovate, about 7 mm. long, white, pink, to deep rose; capsule about equaling the calyx.

Gravelly slopes in the mountains. Eastern Oregon, eastern California and western Nevada. Nevada material seen from Douglas and Washoe Counties.

#### 3. CLAYFONTA LANCEOLATA Pursh, Fl. Amer. Sept. 175. 1814.

"Spring Beauty."

Claytonia rosea Rydb., Bull. Torrey Club 31: 404. 1904.

Perennial with 1 to several stems arising from a deep-seated globose corm, 1-2 cm. diam.; basal leaves usually lacking in flowering plants, cauline leaves opposite, sessile, lanceolate to narrowlyribbed ovate, 2-6 cm. long; flowers 3-18, subumbellate or racemose; sepals ovate, about 3 mm. long; petals 5-6, narrowly obovate, white or pink with lines of rose, 6-12 mm. long; capsule broadly ovoid, 4 mm.



high.

Woody slopes, early in the season. British Columbia to California and east to the Rocky Mountains. Nevada material seen from Elko County.

#### 4. MONTIA L.

Flowers racemose or subumbellate, 1 or 2 bracts at base of inflorescence, flowers usually nodding at anthesis, pedicels mostly recurved after flowering; sepals 2, persistent; petals 5-6, rarely 2, often slightly united at base; stamens opposite and adnate to the petals at base; style branches 3; capsule 3-valved, 2-3-seeded, rarely more; annual or perennial succulent herbs, often propagating by stolons or bulblets, never cormose; leaves opposite, alternate, basal. (Named for Giuseppe Monti, 1682-1760, professor of botany at Bologna.)

A genus of about forty species, five in Nevada.

#### KEY TO SPECIES

Stem leaves 1 pair.

Perennial propagating by bulblet-bearing runners; petals distinct . . . . . . . . . . . . . . . . 4. M. CHAMISSOI Weak branching annual; petals united at base, split on one side.

5. M. HALLII

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1. MONTIA LINEARIS (Dougl.) Greene, Fl. Fran. 181. 1891.

Claytonia linearis Dougl. ex Hook., Fl. Bor. Amer. 1: 224. 1832. Montiastrum lineare (Dougl.) Rydb., Fl. Rocky Mts. 265, 1061. 1917.

Much-branched erect or decumbent annual with alternate linear leaves; stems 5-20 cm. high, terminating in secund often elongate racemes; flowers nodding; sepals unequal, reniform-orbicular, about 4 mm. long; petals unequal, white, about 5 mm. long; stamens 3; capsule ovoid, about 4 mm. long.

Moist soil in meadows and along streams. British Columbia to California and east to Montana and Nevada. Nevada material seen from Douglas, Elko, Ormsby and Washoe Counties.

2. MONTIA SPATHULATA (Dougl.) Howell, Erythea 1: 38. 1893.

<u>Claytonia spathulata</u> Dougl. ex Hook., Fl. Bor. Amer. 1: 226. 1832.

The species is represented in our area by the following varieties:

Var. EXIGUA (Torr. & Gray) Robinson, A. Gray, Syn. Fl. N. Amer. 1: 200. 1838.

Claytonia exigua T. & G., Syn. Fl. N. Amer. 1: 200. 1838.

Small succulent annual with several clustered stems, 3-7 cm. high; basal leaves linear to linear-oblanceolate, 3-5 cm. long; cauline leaves linear to lanceolate, 1-2 cm. long; inflorescence 3-6 flowered, the first pedicel of the raceme bracteate, the others bractless; sepals rounded-ovate, about 3 mm. long; petals obcordate or rounded at the apex, 2-4 mm. long; capsule ovoid, about 3 mm. high.



Sandy or gravelly places. Washington to California and east to western Nevada. Nevada material seen from Washoe County.

Var. <u>VIRIDIS</u> Davidson, So. Calif. Acad. Sci. Bull. 5: 61. 1907. <u>Montia exigua</u> (T. & G.) Jeps. var. <u>viridis</u> (Davidson) Jeps., N. Amer. Fl. 21: 313. 1932.

Plants often up to 8 cm. high; racemes usually longer than in above variety, surpassing the cauline leaves.

Moist rocky slopes, Charleston Mountains, Clark County (Maguire No. 16615).

3. MONTIA PERFOLIATA (Donn) Howell, Erythea 1: 38. 1893.

<u>Claytonia perfoliata</u> Donn, Hort. Cantab. 25. 1796. <u>Limnia</u> <u>perfoliata Haw.</u>, Syn. Pl. Succ. 11. 1812. <u>Claytonia parviflora</u> Dougl., Hook. Fl. Bor. Am. 1: 225. 1832. <u>Montia rubra Howell</u>, Erythea 1: 38. 1893. <u>Montia humifusa</u> Howell, Fl. NW. Am. 1: 96. 1897. <u>Limnia cuprea</u> A. Heller, Muhlenbergia 2: 279. 1907. <u>Limnia utahensis</u> Rydb., Bull. Torrey Club 39: 314. 1912. <u>Claytonia rubra Tidestrom</u>, Contr. U. S. Nat. Herb. 25: 188. 1925. <u>Claytonia utahensis</u> Tidestrom, 1.c. Limnia membranacea Rydb., N. Amer. Fl. 21: 308. 1932.

Succulent annual with glaucous, yellowish green, green, reddish or brownish leaves; stems erect or spreading, 3-30 cm. high; basal leaves various, linear, spatulate, broadly ovate, or rhombic; cauline leaves 2, united in an orbicular or angled disc, or occasionally adnate on one side only; flowers white to pink; inflorescence short and corymbiform to elongated verticillate racemes with a bract at the

first branch of the inflorescence; sepals rounded-ovate or suborbicular, unequal, 2-3 mm. long; petals clawed, retuse, 3-5 mm. long; capsule globose.

An extremely variable species that responds greatly to the influence of light, shade and moisture conditions. Bright light tends to produce plants of a reddish or brownish color. The size of the plants varies considerably in a large patch of this species and the length of the inflorescence, shape of the basal leaves and nature of the connate leaves vary without pattern throughout the range of the species.

Usually found in moist loam soil of wooded mountain slopes. British Columbia to California and east to North Dakota and Arizona. The species has been introduced into many parts of the world as a salad plant and potherb. Nevada material seen from Clark, Douglas, Elko, Humboldt, Lander, Lyon, Mineral, Nye, Ormsby, Storey and Washoe Counties.

4. MONTIA CHAMISSOI (Ledeb.) Durand & Jackson, Ind. Kew. Suppl. 1: 282, as a synonym. 1903.

<u>Claytonia chamissoi</u> Ledeb. ex Spreng. Syst. 1: 780. 1825. <u>Claytonia stolonifera</u> C. Meyer, Nouv. Mem. Soc. Nat. Mosc. 1: 139. 1829. <u>Claytonia chamissonis</u> Eschsch. ex Cham. Linnaea 6: 562. 1821. <u>Claytonia aquatica Nutt. in Torr. & Gray, Syn. Fl. N. Amer. 1: 201.</u> 1838. <u>Crunocallis chamissonis</u> Rydb., Bull. Torrey Club 33: 139. 1906.

Perennial with creeping or occasionally floating branches rooting at the nodes and producing filiform stoloniferous branches bearing globose cormlets at the tip; several pairs of cauline leaves,

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oblanceolate, 1.5-3 cm. long; flowers occasionally replaced by bulblets; inflorescence terminal racemes or sometimes axillary, 2-8flowered, bractless; sepals 2-3 mm. long; petals obovate, white to pinkish, 6-8 mm. long; capsule obovoid, shorter than the sepals.

In shallow water of mountain meadows or wet sandy places along streams. Alaska to California and east to Minnesota and New Mexico. Nevada material seen from Douglas, Elko, Humboldt, Lander, Lyon, Mineral, Nye, Ormsby, Washoe and White Pine Counties.

5. MONTIA HALLII (A. Gray) Greene, Fl. Fran. 180. 1891.

<u>Claytonia hallii</u> A. Gray, Proc. Amer. Acad. 22: 283. 1887. Delicate, yellowish-green annual with branching stems often rooting at the nodes; lower leaves petioled, spatulate, 5-15 mm. long, the upper smaller and sessile; racemes axillary and terminal, 3-10flowered; sepals reniform, 1 mm. long; petals white, united at base, split on one side, scarcely exceeding the sepals; capsule obovoid, scarcely exceeding the sepals; seeds muricate.

Our plants have been referred to <u>Montia fontana</u> L. by some authors. This is a distinct species and may be separated from <u>M. hallii</u> by the somewhat larger size of the plant, 8-25 cm. high in <u>M. fontana</u> and seeds that are shiny and slightly reticulate instead of dull and muricate.

Shallow water in vernal pools and sandy places along streams. British Columbia to northern California and east to northeastern Nevada. Elko County (Maguire & Holmgren No. 22640).

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#### 5. LEWISIA Pursh

Inflorescence racemose, cymose, paniculate, or reduced to a single flower; sepals 2-8, persistent; petals 3-18, often unequal, stamens 4-numerous; styles 3-8, united at the base; capsule ovoid, circumscissile near the base, then splitting upwards into several lobes; seeds several to many; succulent perennials with a short caudex from globose corms or thick fleshy roots; basal leaves several to numerous or none at flowering time, base of the petiole enlarged and usually hyaline; cauline leaves similar to the basal leaves or reduced to scales. (In honor of Captain Meriwether Lewis of the Lewis and Clark Expedition).

A genus of about twenty species, four in Nevada.

#### KEY TO SPECIES

Sepals 2; pedicels not jointed at the base; bracts 1 or 2.
Plants with a globose corm; basal leaves usually wanting at
flowering time. . . . . . . . . . . . . . . . l. L. TRIPHYLLA
Plants with thick fleshy roots; basal leaves numerous.

#### 2. L. PYGMAEA

Sepals 3-9, rarely 2; pedicels jointed to the peduncle; bracts 3-7, verticillate.

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 LEWISIA TRIPHYLLA (S. Wats.) Robinson in A. Gray, Syn. Fl. N. Amer. 1: 269. 1897.

<u>Claytonia triphylla</u> S. Wats., Proc. Amer. Acad. 10: 345. 1875. <u>Oreobroma triphyllum</u> Howell, Erythea 1: 33. 1893. <u>Eriocallis triphylla</u> Rydb., Bull. Torrey Club 33: 140. 1906.

Perennial with 1 to several stems, 3-10 cm. high, arising from globose corms, 3-8 mm. diam.; basal leaves wanting, at least in flowering specimens; cauline leaves 1-4, opposite or verticillate, linear, 2-5 cm. long, subtending the 1-15-flowered corymbose-paniculate inflorescence; sepals oval, entire, 3-4 mm. long; petals 5-7, white with pink veins, 4-5 mm. long; stamens 4-5; capsule ovoid, 3-4 mm. long.

Moist bare ground at high elevations. Washington to California and east to Montana and Colorado. Nevada material seen from Elko and Washoe Counties.

# LEWISIA PYGMAEA (A. Gray) Robinson in A. Gray, Syn. Fl. N. Amer. 1: 268. 1897.

Talinum pygmaeum A. Gray, Am. Journ. Sci. II, 33: 407. 1862. <u>Calandrinia pygmaea</u> A. Gray, Proc. Am. Acad. 8: 623. 1873. (not F. Muell.). <u>Calandrinia nevadensis</u> A. Gray, <u>1</u>. <u>c</u>. <u>Calandrinia grayi</u> Britt., Bull. Torrey Club 17: 312. 1890. <u>Claytonia grayana</u> O. Ktze., Rev. Gen. 57. 1891. <u>Oreobroma pygmaea</u> (A. Gray) Howell, Erythea 1: 33. 1893. <u>Oreobroma nevadense</u> (A. Gray) Howell, <u>1</u>. <u>c</u>. <u>Lewisia</u> <u>nevadensis</u> (A. Gray) Robinson, Syn. Fl. N. Amer. 1: 268. 1897. <u>Oreobroma grayi</u> Rydb., Mem. N. Y. Bot. Gard. 1: 137. 1900. <u>Oreobroma</u>

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minimum A. Nels., Bull. Torrey Club 27: 260. 1900. Lewisia minima A. Nels., Coult. & Nels. Man. Bot. Rocky Mts. 179. 1909.

Low perennial with fusiform to nearly globose, sometimes branched roots; basal leaves numerous, linear to linear-oblanceolate, 3-10 cm. long; scapes several, 2-8 cm. high, usually 1-flowered but sometimes as many as 3, with 2 scarious to hyaline bracts below or slightly above the middle; sepals suborbicular to ovate, erose-denticulate to entire and acute, 4-10 mm. long; petals 5-8, white, pink to lavender, often unequal, 8-15 mm. long; stamens 5-12, capsule ovoid, 5-10 mm. high.

An extremely polymorphic species with several variants often growing side by side.

In mountain meadows or moist open places or ridges at high elevations. Washington to California and east to Montana and New Mexico. Nevada material seen from Elko, Nye, Ormsby, Washoe and White Pine Counties.

Plants with entire sepals have been referred to var. <u>nevadensis</u> (A. Gray) Fosberg in Am. Mid. Nat. 27: 256. 1942.

3. LEWISIA REDIVIVA Pursh, Fl. Amer. Sept. 358. 1814.

Lewisia alba Kellogg, Proc. Calif. Acad. 2: 115. 1861.

Perennial with fleshy branching roots and a short caudex; leaves numerous, usually linear and subterete, 2-5 cm. long, withering before flowering time; scapes several, 1-3 cm. long, 1-flowered, jointed and bearing 2-7 verticillate, scarious, subulate bracts; pedicel 1-1.5 cm.

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long and readily disjointing from the scape after flowering; sepals 5-9, imbricated, oval, white to rose, finally becoming scarious, 1.5-2.5 cm. long; petals 12-20, white to rose, 2-2.5 cm. long; stamens numerous, filaments united below; styles 6-8, united at the base; capsule ovoid, 5-6 mm. high.

The state flower of Montana. The roots of this species are eaten by the Indians.

Dry rocky exposed places. British Columbia to California and east to Montana, Colorado and Arizona. Nevada material seen from Churchill, Elko, Humboldt, Lincoln, Mineral, Nye, Ormsby, Washoe and White Pine Counties.

# LEWISIA REDIVIVA ssp. MINOR (Rydb.) Holmgren, Leafl. West. Bot. 7: 136. 1954.

Lewisia rediviva var. minor (Rydb.) Munz, Man. South.Cal. 158, 598. 1935. Lewisia minor Rydb., N. Amer. Fl. 21: 237. 1932.

Plant with clavate leaves; sepals less than 15 mm. long; pedicels less than 1 cm. long.

Dry rocky ridges. Tooele County, Utah to the Quinn Canyon Range in Nevada to western Nevada and southern California. Nevada material seen from Churchill, Elko, Humboldt, Lincoln, Lyon, Mineral, Nye, Ormsby, Washoe and White Pine Counties.

4. LEWISIA MAGUIREI Holmgren, Leafl. West. Bot. 7: 136. 1954. Perennial with fleshy branching roots and a short caudex; herbage

and inflorescence rose-suffused; basal leaves numerous, linear-oblanceclate, midrib prominent, 1-2 cm. long; scapes several, 1.5-2 cm. long; bearing a 3-flowered cyme, frequently 2 flowers but rarely reduced to 1; bracts usually 3, verticillate, oblong-ovate, scarious, 3-5 mm. long; the peduncle pointed and disarticulating immediately above the bracts, the complete cyme falling at maturity; pedicels 0.5-1.5 mm. long, each subtended by a linear-oblong scarious bract, 8-10 mm. long; sepals 3 or 4, petaloid and becoming scarious, 8-10 mm. long; petals 7-9, white to rose, oblanceolate, 8-12 mm. long; stamens 7-9; styles 4-6; capsule conic-oblong, 7-10 mm. long.

Loose limestone soil with pinyon-juniper and sagebrush. Cherry Creek Summit, Quinn Canyon Range, Nye County, Nevada (Maguire & Holmgren No. 25346).

### 6. PORTULACA (Tourn.) L.

Flowers in close terminal clusters; sepals 2, united below and adnate to the ovary below; petals 5, rarely 4 or 6, inserted on the calyx with the 7 to many stamens; styles usually 3-8-parted; capsule globular, many-seeded, opening transversely, sepals coming off with the summit of the capsule. Low, diffuse, succulent annuals (in ours) with alternate or subopposite leaves. (Old Latin name, of unknown meaning.)

A genus of about a hundred species, one in Nevada.

1. PORTULACA OLERACEA L., Sp. Pl. 445. 1753. "Purslane." Prostrate, succulent, glabrous annual with radially spreading

branches, 6-35 cm. long; leaves alternate, obovate or spatulate, 6-30 mm. long; flowers clustered or solitary, sessile, opening only on sunny mornings, sepals keeled, 3-4 mm. broad, 2.8-4.5 mm. long; petals pale yellow, 3-4.5 mm. long; stamens 7-12; style deeply 5-6-parted; capsule circumscissile at the middle, 5-9 mm. high.

An introduced and common weed of gardens and waste places. Temperate and tropical regions of the world. Nevada material seen from Churchill, Elko, Eureka, Lincoln and Washoe Counties.