

Flora of the Pacific Northwest Checklist

A checklist of the Vascular Plants of the Pacific Northwest
Hosted by the University of Washington Herbarium

Family: Amaranthaceae

92 terminal taxa (species, subspecies, and varieties).

The Flora of the Pacific Northwest Checklist aims to be a complete list of the native and naturalized vascular plants of the Pacific Northwest, with current classifications, nomenclature and synonymy.

Taxa included in the checklist:

- Native taxa whether extant, extirpated, or extinct.
- Exotic taxa that are naturalized, escaped from cultivation, or persisting wild.
- Waifs (e.g., ballast plants, escaped crop plants) and other scarcely collected exotics.
- Interspecific hybrids that are frequent or self-maintaining.
- Some unnamed taxa in the process of being described.

Family classifications follow [APG IV](#) for angiosperms, PPG I (J. Syst. Evol. 54:563-603. 2016.) for pteridophytes, and Christenhusz et al. (Phytotaxa 19:55-70. 2011.) for gymnosperms, with a few exceptions. Nomenclature and synonymy at the rank of genus and below follows the [2nd Edition of the Flora of the Pacific Northwest](#) except where superseded by new information.

Accepted names are indicated with **blue type**, synonyms with **gray type**.

Native species and infraspecies are marked with **bold-face type**.

*Non-native and introduced taxa are preceded by an asterisk.

Please note: This is a working checklist, continuously updated. Use it at your discretion.

Created from the Flora of the PNW Checklist database on June 4th, 2026 at 10:27am PT.

Available online at <https://burkeherbarium.org/pnwflora/>

Comments and questions should be addressed to the checklist administrators:

David Giblin (dgiblin@uw.edu)

Peter Zika (zikap941@gmail.com)

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Dicots:

Amaranthaceae [FNA4, HC, HC2] Amaranth Family

Synonyms:

Chenopodiaceae [FNA4, HC] (Goosefoot Family)

Taxonomy follows APG III (<http://www.mobot.org/mobot/research/apweb/welcome.html>).

Amaranthus [FNA4, HC, HC2]

Sp. Pl. 2: 989. 1753; Gen. Pl., ed. 5, 427. 1754.

amaranth, pigweed

**Amaranthus albus* L. [FNA4, HC, HC2]

Syst. Nat. ed. 10. 2: 1268. 1759.

white pigweed, tumbleweed

Amaranthus albus L. var. *pubescens* (Uline & W.L. Bray) Fernald

Amaranthus pubescens (Uline & W.L. Bray) Rydb.

FNA: "Amaranthus albus and A. blitoides are rather often confused in herbaria. The species are easily distinguished by their seed size and luster."

**Amaranthus arenicola* I.M. Johnst. [FNA4, HC2]

J. Arnold Arbor. 29: 193. 1948.

**Amaranthus blitoides* S. Watson [FNA4, HC2]

Proc. Amer. Acad. Arts. 12: 273. (as Amaranthus). 1877.

matweed, prostrate pigweed

Amaranthus graecizans L. [FNA4, HC], misapplied

Often confused with *Amaranthus albus* L., but differentiated by seed size and luster. Taxonomy follows FNA. *Amaranthus graecizans* is native to the Mediterranean, and has never been found in the western United States.

**Amaranthus blitum* L. [FNA4, HC2]

Sp. Pl. 2: 990. 1753.

livid amaranth, pale amaranth

Amaranthus ascendens Loisel.

Amaranthus blitum L. ssp. *polygonoides* (Moq.) Cattetero

Amaranthus lividus L.

Amaranthus californicus (Moq.) S. Watson [FNA4, HC, HC2]

Bot. California. 2: 42. (as Amaranthus). 1880.

California amaranth

Mengea californica Moq.

**Amaranthus caudatus* L. [FNA4, HC2]

Sp. Pl. 2: 990. 1753.

All WA specimens are from cultivated settings. This species is not considered established in the flora.

**Amaranthus cruentus* L. [FNA4, HC2]

Syst. Nat. ed. 10. 2: 1269. 1759.

blood amaranth, caterpillar amaranth, purple amaranth

Amaranthus hybridus L. ssp. *cruentus* (L.) Thell.

Amaranthus hybridus L. var. *cruentus* (L.) Moq.

Derived from cultivated forms of *Amaranthus hybridus*, and perhaps best treated as a form of that species, according to FNA. Known from a single garden collection in WA. Considered excluded from the flora.

**Amaranthus deflexus* L. [FNA4, HC2]

Mant. Pl. 2: 295. 1771.

Argentina amaranth

**Amaranthus hybridus* L. [FNA4, HC2]

Sp. Pl. 2: 990. 1753.

green amaranth, hybrid amaranth, smooth amaranth, green pigweed, smooth pigweed

Often mistaken for *Amaranthus powellii* or *A. retroflexus*.

**Amaranthus hypochondriacus* L. [FNA4, HC2]

Sp. Pl. 2: 991. 1753.

Single WA specimen from cultivated setting. Not established in the flora.

**Amaranthus powellii* S. Watson [FNA4, HC, HC2]

Proc. Amer. Acad. Arts. 10: 347. (as *Amarantus*). 1875.

green amaranth, Powell's amaranth

Amaranthus bracteosus Uline & W.L. Bray

Amaranthus powellii S. Watson ssp. *bouchonii* (Thell.) Costea & Carretero [KZ99]

Amaranthus powellii S. Watson ssp. *powellii* [KZ99]

Atriplex retroflexus L. var. *powellii* (S. Watson) B. Boivin

**Amaranthus retroflexus* L. [FNA4, HC, HC2]

Sp. Pl. 2: 991. 1753.

redroot pigweed, rough pigweed

Amaranthus retroflexus L. var. *salicifolius* I.M. Johnst.

**Amaranthus spinosus* L. [FNA4, HC2]

Sp. Pl. 2: 991. 1753.

**Amaranthus tuberculatus* (Moq.) J.D. Sauer [FNA4, HC2]

Madroño. 13: 18. 1955.

rough-fruited waterhemp, tall waterhemp

Acnida altissima Riddell ex Moq.

Acnida altissima Riddell ex Moq. var. *prostrata* (Uline & W.L. Bray) Fernald

Acnida altissima Riddell ex Moq. var. *subnuda* (S. Watson) Fernald

Acnida concatenata (Moq.) Small

Acnida subnuda (S. Watson) Standl.

Acnida tamariscina (Nutt.) Alph. Wood

Acnida tamariscina (Nutt.) Alph. Wood var. *concatenata* (Moq.) Uline & W.L. Bray

Acnida tamariscina (Nutt.) Alph. Wood var. *tuberculata* (Moq.) Uline & W.L. Bray

Acnida tuberculata Moq.

Amaranthus ambigens Standl.

Amaranthus rudis J.D. Sauer [KZ99]

Amaranthus tamariscinus Nutt.

No specimens from Washington are known. Considered excluded here until evidence suggests otherwise.

**Amaranthus viridis* L. [FNA4, HC2]

Sp. Pl., ed. 2: 2: 1405. 1763.

Atriplex [FNA4, HC, HC2]

Sp. Pl. 2: 1052. 1753; Gen. Pl. ed. 5, 472. 1754.

greasewood, orache, saltbush, shadscale, silverscale

(see also *Grayia*)

Atriplex argentea Nutt. [FNA4, HC, HC2]

Gen. N. Amer. Pl. 1: 198. 1818.

silver orache, silverscale orache

var. *argentea* [FNA4, HC2, KZ99]

Gen. N. Amer. Pl. 1: 198. 1818.

silver saltbush, silverscale

Atriplex volutans A. Nelson

**var. hillmanii* M.E. Jones [FNA4, HC2]

Contr. W. Bot. 11: 21. 1903 (as hillmani).

Atriplex canescens (Pursh) Nutt. [FNA4, HC, HC2]

Gen. N. Amer. Pl. 1: 197. 1818.

fourwing saltbush, hoary saltbush, shadscale, wingscale

(see also *Atriplex gardneri*)

Atriplex nuttallii S. Watson [HC]

Atriplex nuttallii Wats. var. *nuttallii* [HC]

var. *canescens* [FNA4, HC, HC2]

Gen. N. Amer. Pl. 1: 197. 1818.

hoary saltbush

Atriplex canescens (Pursh) Nutt. var. *angustifolia* (Torr.) S. Watson

Atriplex canescens (Pursh) Nutt. var. *occidentalis* (Torr. & Frém.) S.L. Welsh & Stutz

FNA4 includes Washington within the range of this taxon, indicating a population in eastern Washington near Spokane.

Atriplex confertifolia (Torr. & Frém.) S. Watson [FNA4, HC, HC2]

Proc. Amer. Acad. Arts. 9: 119. 1874.

spiny saltbush, shadscale, sheepfat

Atriplex dioica Raf. [FNA4, HC, HC2]

Amer. Monthly Mag. & Crit. Rev. 2(2): 119. 1817.

thickleaf orache, saline saltbush

Atriplex dioica (Nutt.) J.F. Macbr., misapplied

Atriplex patula L. var. *subspicata* (Nutt.) S. Watson

Atriplex subspicata (Nutt.) Rydb.

This is the common native annual of coastal salt marshes and beaches in our area. Taxonomy and nomenclature follow FNA. FNA4: "The distribution of the species is evidently bipartite, with an eastern coastal series extending northward mainly from New Jersey to Newfoundland and along the St. Lawrence seaway, and perhaps extending to James Bay of Hudson Bay. The western grouping lies mainly west of the 95th meridian of longitude, where it has been collected since early historical times to the present in saline marshes or other saline sites from the Yukon Territory and Northwest Territories, southward to southern California, northern Arizona, northern New Mexico, and Oklahoma. Rafinesque gave the following information: "Stem upright angular branched, leaves petiolate, deltoid, acute, thick, scaly, the proximal opposite toothed, the distal alternate, hastated, entire: flowers dioical glomerate, male spiked naked, female unequal, sepals deltoid, warty-crested." The name *Atriplex dioica* Rafinesque antedates *Chenopodium subspicatum* Nuttall by half a year, being published in December 1817. Hence, it is the correct name for the widely ranging species, which has passed most recently under the name *A. subspicata*. Nuttall's description of the habitat of *Chenopodium subspicatum* is: "In saline soils around Mandan Village, Missouri," a designation of habitat that applies to this day. The species forms a mirror-image set of specimens with the remarkably similar *Atriplex prostrata*, from which it may be distinguished in most cases by the thickened, merely ovate to lanceolate leaf blades, and less commonly but in some localities exclusively triangular-hastate to lanceolate, mostly scurfy and prominently 3-veined leaf blades. In some specimens, including the types of both *Chenopodium subspicatum* and *Atriplex carnososa*, the blades bear a hastate lobe at or above the base and sometimes match triangular-hastate profile of *A. prostrata*. The leaves of *A. prostrata* are typically thin-textured, green, not scurfy, and the veins of the blade are obscure. I. J. Bassett et al. (1983) disallowed within *A. dioica* (as *A. subspicata*) any but those with lanceolate blades, including those with the proximalmost leaves with a pair of subbasal hastate lobes. However, there are numerous specimens in which the blades are thickened and transitional in that regard to the triangular-hastate profile as in *A. prostrata*. Certainly those specimens with triangular or triangular-hastate leaves taken prior to the introduction of *A. prostrata* sometime late in the nineteenth or early twentieth century, clearly belong to the indigenous *A. dioica*. Whether there are intermediates between diploid ($2n = 18$) *A. prostrata* and tetraploid or hexaploid ($2n = 36, 54$) *A. dioica* is not known. There does not seem to be any consistent feature or combination of features by which all specimens can be assigned to one or the other of the two taxa. It seems probable, however, that *A. prostrata* is a late

introduction from Europe, and that it, along with the related *A. heterosperma*, is now invading habitats previously occupied exclusively by the indigenous *A. dioica*."

***Atriplex gardneri* (Moq.) D. Dietr. [FNA4, HC2]**

Syn. Pl. 5: 537. 1852.

Gardner's saltbush

var. *aptera* (A. Nelson) S.L. Welsh & Crompton [FNA4, HC2]

Great Basin Naturalist. 55: 326. 1995.

Nelson's saltbush

Atriplex canescens (Pursh) Nutt. var. *aptera* (A. Nelson) C.L. Hitchc. [HC]

var. *falcata* (M.E. Jones) S.L. Welsh [FNA4, HC2]

Great Basin Naturalist. 44: 191. 1984.

moundscale, gardner's saltbush, sickle saltbush, saltsage

Atriplex falcata (M.E. Jones) Standl. [KZ99]

Atriplex nuttallii S. Watson var. *falcata* M.E. Jones [HC]

***Atriplex gmelinii* C.A. Mey. ex Bong. [FNA4, HC2]**

Mém. Acad. Imp. Sci. St. Pétersbourg, Sér. 6, Sci. Math. 2: 160. 1838.

Gmelin's orache, Gmelin's saltbush

var. *gmelinii* [FNA4, HC2]

Mém. Acad. Imp. Sci. St. Pétersbourg, Sér. 6, Sci. Math. 2: 160. 1838.

Gmelin's orache, Gmelin's saltbush

Atriplex gmelinii C.A. Mey. ex Bong. var. *zosterifolia* (Hook.) Moq.

Atriplex patula L. var. *obtusa* (Cham.) C.L. Hitchc. [HC]

Atriplex patula L. var. *zosteraefolia* (Hook.) Hitchc. [HC]

Atriplex patula L. var. *zosterifolia* (Hook.) C.L. Hitchc.

****Atriplex heterosperma* Bunge [FNA4, HC, HC2]**

Beitr. Fl. Russl. 272. 1852.

orache, Russian atriplex orache

Atriplex micrantha Ledeb. [KZ99], misapplied

FNA4: "Russian atriplex occurs with greasewood, saltgrass, cottonwood, tamarix, and weedy annuals. It is a handsome, vigorous ruderal, weedy annual indigenous to Europe east to Chinese Turkestan that appears to be invading saline lowland and other disturbed areas throughout much of North America. It is similar to *Atriplex prostrata* from which it can be distinguished by the entire margin and smooth surfaces of the fruiting bracteoles. Additionally, the leaves are thick-textured and often bear one or more lobes or teeth irregularly along the blade above the subbasal main hastate lobe. The staminate spikes when young are very slender, mainly less than 2.5 mm thick."

****Atriplex hortensis* L. [FNA4, HC, HC2]**

Sp. Pl. 2: 1053. 1753.

garden orache, French spinach

Atriplex nitens Schkuhr

FNA4: "*Atriplex hortensis* has been widely grown as a potherb, has escaped from cultivation, and is now established especially in moist ruderal sites. It is easily distinguished by its rounded, samaralike, entire, and smooth fruiting bracteoles, and the presence of two kinds of pistillate flowers, the one enclosed by bracteoles and lacking sepals, the other without bracteoles but subtended by sepals. *Atriplex nitens* (see list of excluded taxa) is distinguished from *A. hortensis* in *Flora Europea* (P. Aellen 1964b) by having leaf blades densely white scurfy beneath, the distal surface lustrous, as opposed to green and dull for *A. hortensis*. Occasional specimens, treated here as *A. hortensis*, have leaves somewhat scurfy."

****Atriplex littoralis* L. [FNA4, HC2]**

Sp. Pl. 2: 1054. 1753.

grassleaf orache, narrow-leaved orache

Atriplex patula L. var. *littoralis* (L.) A. Gray [HC]

****Atriplex longipes* Drejer [Flora Europaea, HC2]**

Fl. Excurs. Hafn. 107. 1838.
long-stalked orache, Baltic saltbush

Atriplex longipes Drejer ssp. *praecox* (Hülph.) Turesson
Atriplex nudicaulis Boguslaw [FNA4], misapplied
Atriplex praecox Hülph.

**Atriplex oblongifolia* Waldst. & Kit. [FNA4, HC2]

Descr. Icon. Pl. Hung. 3: 278, plate 211. 1812.
oblongleaf orache

Reported for Washington in Bassett et al. (1983). FNA4: "I. J. Bassett et al. (1983) indicated that *Atriplex oblongifolia* formed abundant, very fertile hybrids with *A. patula* in the Botanic Garden at Manchester University. This is a weedy species with facies similar to both *A. dioica* and *A. glabriuscula* var. *acadiensis*. The proximal branches at least are opposite, similar to phases of the nearly allied *A. patula*, however. It is likewise an introduced ruderal weed of roadsides and other waste places. Its spread in North America awaits documentation. The thin, entire fruiting bracts without appendages are pointed to as diagnostic of this entity from other similar species."

**Atriplex patula* L. [FNA4, HC, HC2]

Sp. Pl. 2: 1053. 1753.
halberdleaf orache, spear orache
(see also *Atriplex gmelinii*, *Atriplex littoralis*, *Atriplex prostrata*)

Atriplex hastata L. ssp. *patula* (L.) S. Pons
Atriplex hastata L. var. *patula* (L.) Farw.
Atriplex patula L. var. *patula* [HC]

FNA4: "*Atriplex patula* appears to have been a rather recent introduction in North America from Eurasia, not arriving perhaps until sometime in the early to mid-eighteenth century. It simulates depauperate specimens of *A. dioica*, *A. glabriuscula*, and other similar species when leaves are reduced to a near-linear profile. Such specimens are difficult if not impossible to assign to any of the species."

**Atriplex prostrata* Boucher ex DC. [FNA4, HC2]

Fl. Franç. ed. 3. 3: 387. 1805.
fat hen, hastate orache, thin-leaf orache

Atriplex triangularis Willd. [JPM]

A common annual introduction in coastal habitats, also found east of the Cascades. FNA4: "*Atriplex prostrata* often grows with willow, tamarix, *Scirpus* (*Schoenoplectus* and *Bulboschoenus* segregates), *Juncus*, *Distichlis*, and *Typha*. Perhaps the phase along coastal eastern North America is indigenous, but this and the related *Atriplex heterosperma* evidently moved quickly from one palustrine habitat to another following subsequent introductions from the Old World. They were probably initially introduced as ballast waifs, and subsequently dispersed by waterfowl. The two species are now commonplace in lands within and adjacent to marshes in much of North America west of the initial sites of introduction. The name for the species taken up here follows the nomenclatural interpretation of J. McNeill et al. (1983)."

**Atriplex rosea* L. [FNA4, HC, HC2]

Sp. Pl., ed. 2. 2: 1493. 1763.
red orache, tumbling orache

FNA4: "At least some early collections were from ballast dumps at harbors on both coasts. It seems probable that the plants were quickly spread inland from initial centers of introduction by birds and more recently along railroads."

**Atriplex semibaccata* R. Br. [FNA4, HC2]

Prodr. 406. 1810.
Australian saltbush, berry saltbush, creeping saltbush

Atriplex flagellaris Wooton & Standl.

Perennial subshrub reported for Washington in FNA4, but no specimens have been seen. Until specimens from Washington are collected this species is considered excluded from the flora.. FNA4: "The red-fleshy fruiting bracteoles are diagnostic of this introduced perennial, which is multi-stemmed from an often buried woody caudex. The Australian species *Atriplex muelleri* Benthham is somewhat similar. It has been has

reported, but not verified, in the North American flora."

Atriplex truncata (Torr. ex S. Watson) A. Gray [FNA4, HC, HC2]

Proc. Amer. Acad. Arts. 8: 398. 1872.

wedge orache, wedgeleaf orache, wedgescale orache

Atriplex subdecumbens M.E. Jones

Atriplex truncata (Torr. ex S. Watson) A. Gray var. *stricta* A. Gray

****Axyris*** [FNA4, HC2]

Sp. Pl. 2: 979. 1753; Gen. Pl. ed. 5, 420. 1754.

****Axyris amaranthoides*** L. [FNA4, HC2]

Sp. Pl. 2: 979. 1753.

Russian pigweed

****Bassia*** [FNA4, HC, HC2]

Mélanges Philos. Math. Soc. Roy. Turin. 3: 177. 1766.

bassia, smotherweed

****Bassia hyssopifolia*** (Pall.) Kuntze [FNA4, HC, HC2]

Revis. Gen. Pl. 2: 547. 1891.

five-hook bassia, five-hook smotherweed

Echinopsilon hyssopifolium (Pall.) Moq.

Salsola hyssopifolia Pall.

****Bassia prostrata*** (L.) A.J. Scott [HC2]

****Bassia scoparia*** (L.) A.J. Scott [HC2]

Feddes Repert. 81(2?3): 108. 1978.

red belvedere, mock cypress, summer cypress

Chenopodium scoparium L.

Kochia alata Bates

Kochia scoparia (L.) Schrad. [FNA4, HC]

Kochia scoparia (L.) Schrad. f. *trichophylla* (A. Voss) Stapf ex Schinz & Thell.

Kochia scoparia (L.) Schrad. ssp. *scoparia* [FNA4]

****Beta*** [FNA4, HC, HC2]

Sp. Pl. 1: 222. 1753; Gen. Pl. ed. 5, 103. 1754.

****Beta vulgaris*** L. [FNA4, HC, HC2]

Sp. Pl. 1: 222. 1753.

common beet

Known from a single collection in an urbanized setting. Not considered part of the flora until specimens are deposited indicating that it is naturalized.

*ssp. ***vulgaris*** [FNA4, HC2]

Sp. Pl. 1: 222. 1753.

beet, cultivated beet

No specimens from wild populations in Washington are present in Pacific Northwest herbaria. This species is considered excluded until naturalized populations are documented.

Blitum [HC2]

goosefoot, povertyweed

Monolepis [FNA4]

Monolepis [HC], orthographic variant

Neomonolepis

Blitum capitatum L. [HC2]

Sp. Pl. 1: 4. 1753.

strawberry blite, Indian ink, Indian paint

Chenopodium capitatum (L.) Ambrosi [FNA4, HC]
Chenopodium capitatum (L.) Ambrosi var. *capitatum* [FNA4]

***Blitum hastatum* Rydb. [HC2]**

Bull. Torrey Bot. Club 28: 273. 1901.
Indian ink, Indian-paint, strawberry-blight

Chenopodium capitatum (L.) Ambrosi var. *parvicapitatum* S.L. Welsh [FNA4]
Chenopodium overi Aellen

***Blitum nuttallianum* Schult. [HC2]**

Mant. 1: 65. 1822.
Nuttall's povertyweed

Monolepis chenopodioides Moq.
Monolepis nuttalliana (Schult.) Greene [FNA4]
Monolepis nuttalliana (Schultes) Greene [HC], orthographic variant

***Blitum spathulatum* (A. Gray) S. Fuentes, Uotila & Borsch [HC2]**

Willdenowia 42(1): 17. 2012.
prostrate monolepis

Monolepis spathulata A. Gray [FNA4]
Monolepis spathulata Gray [HC], orthographic variant
Neomonolepis spathulata (A.Gray) Sukhor.

Not reported in WA by either H&C or FNA, however identification of single specimen collected in WA verified by Noel Holmgren in 2011 in association with publication of final volume of Intermountain Flora. Presence in WA represents significant disjunction from known range from southern ID, southeastern OR south to Baja California.

****Blitum virgatum* L. [HC2]**

Sp. Pl. 1: 4-5. 1753.
leafy goosefoot

Chenopodium foliosum (Moench) Asch. [FNA4, HC]
Chenopodium virgatum Thunb. [Abrams]

FNA4: "*Chenopodium foliosum* is probably native to the mountains of south and central Europe and western Asia. Several closely related segregate species are currently recognized within the *C. foliosum* group (P. Uotila 1979, 1993, 1997). *Chenopodium foliosum* listed and illustrated in J. C. Hickman (1993) is in fact *C. capitatum* var. *parvicapitatum*."

***Chenopodiastrum* [HC2]**

goosefoot

****Chenopodiastrum murale* (L.) S. Fuentes, Uotila & Borsch [HC2]**

Willdenowia 42(1): 14. 2012.
nettleleaf goosefoot, wall goosefoot, sowbane

Chenopodium murale L. [FNA4, HC]
Chenopodium urbicum L. [FNA4, HC], misapplied

KZ notes *Chenopodium urbicum* was reported from farmyards in Whatcom Co. by Muenscher (1930), whose voucher may be at CU or WS. However, Muenscher (1941) does not list the species again, instead listing *C. murale* from farmyards. The FNA authors did not find a specimen to verify the Washington report of *C. urbicum*, or reports from Oregon and British Columbia, so the occurrence of *Chenopodium urbicum* must remain dubious in the Pacific Northwest. Validated FNA records of *C. urbicum* are all mapped in the northeastern United States. FNA4: "*Chenopodium murale* is distinctive and is one of the more common species of the genus in the world, especially in tropical and subtropical regions."

***Chenopodiastrum simplex* (Torrey) S. Fuentes, Uotila & Borsch [HC2]**

Willdenowia 42(1): 14. 2012.
giant goosefoot, maple leaf goosefoot

Chenopodiastrum hybridum (L.) S. Fuentes, Uotila & Borsch, misapplied
Chenopodium gigantospermum Aellen

Chenopodium hybridum L. var. *gigantospermum* (Aellen) Rouleau

Chenopodium hybridum L. var. *simplex* Torr.

Chenopodium simplex (Torr.) Raf. [FNA4]

A forest species that can occur in waste ground. Here we follow the taxonomy of FNA, and consider *Chenopodium hybridum* L. to be an Old World species not recorded in our area, with differences in the seed coat, pericarp, and chromosome number (Baranov 1964). FNA4: "A closely related Eurasian diploid species, *Chenopodium hybridum* Linnaeus, probably also occurs in North America as introduced. Its occurrence in the New World needs confirmation. *Chenopodium simplex* differs from its Eurasian counterpart in having a smoother seed coat, a yellowish pericarp that is more adherent to the seed, and a different chromosome number (A. I. Baranov 1964; R. D. Dorn 1988b)."

***Chenopodium* [FNA4, HC, HC2]**

Sp. Pl. 1: 218. 1753; Gen. Pl. ed. 5. 103. 1754.

goosefoot, lamb's quarters, pigweed

(see also *Blitum*, *Chenopodiastrum*, *Dysphania*, *Oxybasis*)

****Chenopodium album* L. [FNA4, HC, HC2]**

Sp. Pl. 1: 219. 1753.

lambsquarters, pigweed

Chenopodium album L. var. *album* [KZ99]

Chenopodium album L. var. *missouriense* (Aellen) Bassett & Crompton [KZ99]

Chenopodium album L. var. *stevensii* Aellen [KZ99]

FNA4: "*Chenopodium album*, one of the worst weeds and most widespread synanthropic plants on the Earth, in its broad circumscription is also among the most polymorphic plant species. It is a loosely arranged aggregate of still insufficiently understood races. Hundreds of segregate microspecies and infraspecific entities (including nomenclatural combinations) of the *C. album* aggregate have been described and/or recognized by various authors. Some authors have recognized numerous segregate intergrading species, while others have developed elaborate infraspecific hierarchies with numerous subspecies, varieties, forms, and even numerous subforms (e.g., B. Jüttersonke and K. Arlt 1989), or have combined both approaches. Neither approach has brought satisfactory and uncontroversial results. It is evident that most recent evolutionary processes within the group were greatly affected by anthropic factors, including extensive recent invasions, hybridization between previously geographically isolated taxa, poly-ploidy, intensive selective processes and mutagenesis in synanthropic habitats, gene drift, and so forth. All of these modern factors further complicated the taxonomic situation. Consequently, no infraspecific taxa are formally recognized in the present treatment. We attempt, however, to outline below the most common or noteworthy groups currently placed in *Chenopodium album* sensu lato. Although we list such groups under binomials, they should be considered here as informal groupings rather than accepted species. It should be also kept in mind that many enigmatic and deviant forms of the *Chenopodium album* aggregate are in fact hybrids with other (occasionally several) species, and between infraspecific entities. *C. album* hybridizes with *C. suecicum* (producing *C. xfersajevii* Aellen & Iljin), *C. opulifolium* (producing *C. xpreissmannii* Murr), *C. strictum* [producing *C. xpseudostriatum* (Zschacke) Murr], *C. ficifolium* (producing *C. xjedlickae* Dvorák or *C. xzahnii* Murr), *C. berlandieri* (producing *C. xvariabile* Aellen), and some other species."

***Chenopodium atrovirens* Rydb. [FNA4, HC2]**

Mem. New York Bot. Gard. 1: 131. 1900.

pinyon goosefoot

Chenopodium fremontii S. Watson var. *atrovirens* (Rydb.) Fosberg [HC]

Similar to *C. pratericola*.

***Chenopodium berlandieri* Moq. [FNA4, HC2]**

Chenop. Monogr. Enum. 23. 1840.

Berlandieri's goosefoot

var. *zschackei* (Murr) Murr ex Graebn. [FNA4, HC2]

Syn. Mitteleur. Fl. 5(1): 81. 1913.

pitseed goosefoot

Chenopodium berlandieri Moq. ssp. *zschackei* (Murr) A. Zobel

Chenopodium zschackei Murr

Very similar in appearance to *C. album*, but distinguished from that species by having more open inflorescence, honeycomb-pitted pericarp, and strongly carinate (keeled) sepals in fruit. Need mature fruits to distinguish between the two taxa.

**Chenopodium ficifolium* Sm. [FNA4, HC2]

Fl. Brit. 1: 276. 1800.

fig-leaved goosefoot

Chenopodium fremontii S. Watson [FNA4, HC, HC2]

Botany (Fortieth Parallel). 287. (as fremonti). 1871.

Fremont's goosefoot

(see also *Chenopodium atrovirens*)

Chenopodium fremontii S. Watson var. *fremontii* [HC]

Chenopodium incanum (S. Watson) A. Heller [FNA4, HC2]

Pl. World. 1: 23. 1897.

mealy goosefoot, silvery goosefoot

var. *incanum* [FNA4, HC2]

Chenopodium fremontii S. Watson var. *incanum* S. Watson [HC]

Chenopodium incognitum Wahl [HC2]

Chenopodium leptophyllum (Moq.) Nutt. ex S. Watson [FNA4, HC, HC2]

Proc. Amer. Acad. Arts. 9: 94. 1874.

narrowleaf goosefoot

(see also *Chenopodium desiccatum*, *Chenopodium subglabrum*)

Chenopodium album L. var. *leptophyllum* Moq.

Chenopodium leptophyllum (Nutt. ex Moq.) S. Watson var. *leptophyllum* [HC]

**Chenopodium opulifolium* Schrad. ex DC. [FNA4, HC2]

Fl. Franç. ed. 3. 6: 372. 1815.

Single WA specimen from Suksdorf. No evidence that the species is established in the flora.

Chenopodium pratericola Rydb. [FNA4, HC2]

Bull. Torrey Bot. Club. 39: 310. 1912.

desert goosefoot, narrowleaf goosefoot

Chenopodium desiccatum A. Nelson var. *leptophylloides* (Murr) Wahl

Chenopodium xschulzeanum Murr [FNA4]

Allg. Bot. Z. Syst. xii. 110. 1906.

hybrid goosefoot

FNA4: "Hybrids between *Chenopodium rubrum* and *C. glaucum* are known as *C. xschulzeanum* Murr and have been seen from waste areas in Illinois and Washington. These plants in general resemble *C. rubrum* with small, mealy leaves and horizontal seeds, but they also have some leaves shaped like those of *C. glaucum*." No specimens have been collected in Washington, so this species is considered excluded.

**Chenopodium strictum* Roth [FNA4, HC2]

Nov. Pl. Sp. 180. 1821.

white goosefoot

Chenopodium album L. ssp. *striatum* (Kra?an) Murr

Chenopodium album L. var. *microphyllum* Boenn. [KZ99]

Chenopodium album L. var. *striatum* Kra?an [KZ99]

Chenopodium striatum (Kra?an) Murr

Chenopodium strictum Roth ssp. *striatiforme* (Murr) Uotila

FNA4: "Presumed native American plants of *Chenopodium strictum* were recognized as a separate species, subspecies, or variety [*C. glaucophyllum* Aellen; *C. strictum* subsp. *glaucophyllum* (Aellen) Aellen; *C. strictum* var. *glaucophyllum* (Aellen) Wahl]. These plants are very variable, and usually have broader leaves and more lax inflorescences, which might be a result of hybridization with other species of the *C.*

album aggregate. The native status of such forms is very questionable. Typical *C. strictum* also occurs in North America, but seems to be less common. Some narrow species and hybrids of the *C. strictum* aggregate are recognized in Eurasia (P. Aellen 1928; F. Dvořák 1989; P. Uotila 1977, 1993, 1997). Some of these taxa, especially *C. striatiforme* Murr and *C. novopokrovskyanum* (Aellen) Uotila, are superficially similar to the native North American taxa of subsect. *Leptophylla*. Eurasian forms of the *C. strictum* group usually can be distinguished by their venation pattern (in most cases more than three visible veins even in narrowest leaves). Considering the likely alien status and wide variability of *C. strictum* in North America, no attempt is made here to subdivide it into infraspecific entities."

Chenopodium subglabrum (S. Watson) A. Nelson [FNA4, HC2]

Bot. Gaz. 34: 362. 1902.

smooth goosefoot

Chenopodium leptophyllum (Moq.) Nutt. ex S. Watson var. *subglabrum* S. Watson [HC]

****Chenopodium vulvaria*** L. [FNA4, HC2]

Sp. Pl. 1: 220. 1753.

Corispermum [FNA4, HC, HC2]

Sp. Pl. 1: 4. 1753; Gen. Pl. ed. 5. 5. 1754.

bugseed, tickseed

Corispermum americanum (Nutt.) Nutt. [FNA4, HC2]

Trans. Amer. Philos. Soc., n.s. 5: 165. 1834.

American bugseed

var. *americanum* [FNA4, HC2]

American bugseed

Taxonomy follows FNA, where all members of the genus are considered native in Washington (Bentacourt et al. 1984). Formerly treated as introductions from Europe (Maihle & Blackwell 1978).

Corispermum hookeri Mosyakin [FNA4, HC2]

Novon. 5: 349. 1995.

Hooker's bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

var. *pseudodeclinatum* Mosyakin [FNA4, HC2]

Novon. 5: 350. 1995.

Hooker's bugseed

Known in Washington from the mouth of Okanogan River, and possibly along the Columbia River in Grant County. May intergrade with *C. pallasii*.

Corispermum pacificum Mosyakin [FNA4, HC2]

Novon. 5: 345, fig. 1A. 1995.

Pacific bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

Our most common species in Washington, on the banks of the Snake and Columbia Rivers. Putative hybrids with *C. villosum* reported in FNA. FNA4: "*Corispermum pacificum* seems to be closely related to Siberian *C. crassifolium* Turczaninov and *C. maynense* Ignatov. The latter species occurs in the northeastern Russian Far East and may be expected to occur in Alaska. *Corispermum pacificum* differs from *C. maynense* by its usually more robust habit, and its wing rounded (rarely rounded-truncate or indistinctly emarginate, but not triangular) at apex. From *C. crassifolium* it may be distinguished by the constant presence of perianth segments, and more flattened black mature fruits. *Corispermum pacificum* probably also occurs in adjacent regions of British Columbia. *Corispermum pacificum* is placed in subsect. *Crassifolia* (S. L. Mosyakin 1997). This subsection seems to be of Siberian origin, with its central species, *C. crassifolium*, being closest to the hypothetical ancestral taxon. The presence of perianth segments in *C. pacificum* may be explained by ancient hybridization with representatives of subsect. *Pallasiana*. Reproductive isolation between the sympatric species of *Corispermum* may be achieved by different flowering periods. Occasional hybrids between *C. pacificum* and *C. villosum* are similar in their habit to *C. pacificum* in having usually broad leaves and rather dense inflorescences but they have mostly aborted fruits suggesting that *C. pacificum* and *C. villosum* are taxonomically distant species."

**Corispermum pallasii* Steven [FNA4, HC2]

Mém. Soc. Imp. Naturalistes Moscou. 5: 336. 1817.
Pallas' bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

Occurs along the Columbia River Basin and tributaries in Washington, with collections from Okanogan, Grant, and Wahkiakum counties.

**Corispermum pallidum* Mosyakin [FNA4, HC2]

Novon. 5: 347, fig. 1B. 1995.
pale bugseed

Corispermum nitidum Kit. ex Schult. [FNA4, HC], misapplied

Recently described from sand deposits in Douglas and Grant Cos. (Mosyakin 1995), last collected in 1931. FNA4: "The combination of characteristics of *Corispermum pallidum* is very distinctive: pale, flattened, and small fruit body; very wide (especially as compared to the fruit dimensions), thin, translucent wing with erose margins, long style bases (ca. 0.7-1 mm, including their parts adnate to wing), distinctly divided in their upper parts to below the edge of the wing. Young bracts and distal leaves of *C. pallidum* are often papillose on margins and veins, in combination with typical branched trichomes. *Corispermum pallidum* seems to be related to the eastern Asian *C. macrocarpum* Bunge ex Maximowicz aggregate (subsect. *Platyptera* Mosyakin)."

**Corispermum villosum* Rydb. [FNA4, HC2]

Bull. Torrey Bot. Club. 24: 191. (as *Coriospermum*). 1897.
hairy bugseed

Corispermum hyssopifolium L. [FNA4, HC], misapplied

Closely related to *Corispermum americanum* and *C. pallasii*. FNA4: "*Corispermum villosum* may also occur in British Columbia, Manitoba, Nevada, South Dakota, and Utah. It is probably introduced rather than native in Ontario (where it is found mostly in Thunder Bay district, known for its grain elevators and mills), Quebec, and Wisconsin. Plants from Minnesota and North Dakota are transitional toward *C. americanum*. *Corispermum villosum* is also distinguished by having style bases forming a triangular "beak" distinctly protruding over the edge of the wing/fruit. Some specimens of *C. villosum* are very similar to the small-fruited and narrow-winged European representatives of *C. pallasii*. Together with some Eurasian species, *C. pallasii*, *C. americanum*, and *C. villosum* belong to the same group of closely related species, and occasional transitional forms between these taxa are not uncommon in North American material. The names *Corispermum orientale* Lamarck and *C. hyssopifolium* were commonly misapplied to *C. villosum*."

**Cycloloma* [FNA4, HC2]

Chenop. Monogr. Enum. 17. 1840.
cycloloma, pigweed

**Dysphania* [FNA4, HC2]

Prodr. 411. 1810.

**Dysphania ambrosioides* (L.) Mosyakin & Clemants [FNA4, HC2]

Ukrayins'k. Bot. Zhurn., n. s. 59: 382. 2002.
Mexican tea, wormseed

Chenopodium ambrosioides L. [HC]

Teloxys ambrosioides (L.) W.A. Weber

FNA4: "Southern populations of *Dysphania ambrosioides* are native while those populations in the northern part of the flora area are introduced."

**Dysphania atriplicifolia* (Spreng.) G.Kadereit, Sukhor. & Uotila [WTU]

Taxon 70(3): 542. 2021.
winged pigweed

Cycloloma atriplicifolium (Spreng.) J.M. Coult.

First collected in WA in 2023 in Asotin County.

**Dysphania botrys* (L.) Mosyakin & Clemants [FNA4, HC2]

Ukrayins?k. Bot. Zhurn., n. s. 59: 383. 2002.
Jerusalem oak goosefoot, Jerusalem oak

Chenopodium botrys L. [HC]
Teloxys botrys (L.) W.A. Weber

The similar Eurasian and African species *Chenopodium schraderiana* Schult. should be sought as an adventive, according to FNA. It has keeled perianth parts with nearly sessile glands, and a leafy inflorescence, compared to *C. botrys*. FNA4: "*Dysphania botrys* is related to a species from Africa and southern Eurasia, *D. schraderiana* (Schultes) Mosyakin & Clemants, which may occur locally in North America as introduced. *Dysphania schraderiana* has distinctly keeled perianth segments with mostly sessile or subsessile glands. The general inflorescence in *D. schraderiana* is usually leafy almost to the top, distal cauline leaves are similar to proximal ones (in *D. botrys* distal leaves are normally much reduced, and the distal portion of the general inflorescence appears nearly leafless). H. A. Wahl (1954) reported that *D. schraderiana* (as *Chenopodium schraderianum*) had been grown in Ontario. He did not indicate that it had escaped."

**Dysphania multifida* (L.) Mosyakin & Clemants [FNA4, HC2]

Ukrayins?k. Bot. Zhurn., n. s. 59: 382. 2002.

Chenopodium multifida L. [HC], orthographic variant

**Dysphania pumilio* (R. Br.) Mosyakin & Clemants [FNA4, HC2]

Ukrayins?k. Bot. Zhurn., n. s. 59: 382. 2002.

small crumbweed, clammy goosefoot

Chenopodium pumilio R. Br. [HC]
Teloxys pumilio (R. Br.) W.A. Weber

FNA4: This species has gone under the misapplied name *Chenopodium carinatum* R. Brown (now *Dysphania carinata*).

Grayia [FNA4, HC2]

Bot. Beechey Voy. 387. 1841.

hopsage

Zuckia [FNA4]

Grayia spinosa (Hook.) Moq. [FNA4, HC2]

Prodr. 13(2): 119. 1849.

spiny hopsage

Atriplex spinosa (Hook.) Collotzi [HC]
Chenopodium spinosum Hook.

**Halogeton* [FNA4, HC, HC2]

Icon. Pl. 1: 10, plate 40. 1829.

halogeton

**Halogeton glomeratus* (M. Bieb.) C.A. Mey. [FNA4, HC, HC2]

Icon. Pl. 1: 10. 1829.

halogeton, saltlover

Anabasis glomerata M. Bieb.

FNA4: "A noxious and toxic weed in disturbed, barren, alkaline soils, *Halogeton glomeratus* is able to withstand high concentrations of salinity. It is often associated with *Sarcobatus vermiculatus* and *Atriplex confertifolia* and is found in the cold deserts of western United States. The first collection of *Halogeton* in the United States was by Ben Stahmann in Wells, Nevada, in 1934. It was not until the fall of 1942, when a herder lost 160 sheep, that the species was recognized as toxic to livestock (J. A. Young et al. 1999)."

Krascheninnikovia [FNA4, HC2]

Novi Comment. Acad. Sci. Imp. Petrop. 16: 551. 1772.

white sage, winter sage, winterfat

Eurotia [HC]

Krascheninnikovia lanata (Pursh) A. Meeuse & A. Smit [FNA4, HC2]

Taxon. 20: 644. 1971.

winterfat

Ceratoides lanata (Pursh) J.T. Howell

Diotis lanata Pursh

Eurotia lanata (Pursh) Moq. [HC]

Eurotia lanata (Pursh) Moq. var. *subspinosa* (Rydb.) Kearney & Peebles

FNA4: "Krascheninnikovia lanata often forms pure stands. It occurs throughout the intermountain region except in the northwest corner of central Oregon. It is called winterfat because of its nutritional importance for domestic livestock, especially sheep."

****Lipandra*** [HC2]

goosefoot

****Lipandra polysperma*** (L.) S. Fuentes, Uotila & Borsch [HC2]

many-seeded goosefoot

Chenopodium polyspermum L. [FNA4, HC]

*var. ***acutifolia*** (Sm.) Mosyakin [HC2]

Chenopodium polyspermum L. var. *acutifolium* (Sm.) Gaudin [FNA4]

Micromonolepis [FNA4, HC2]

Nat. Pflanzenfam., ed. 2. 16c: 499. 1934.

povertyweed

Micromonolepis pusilla (Torr. ex S. Watson) Ulbr. [FNA4, HC2]

Nat. Pflanzenfam., ed. 2. 16c: 500. 1934.

red povertyweed

Monolepis pusilla Torr. ex S. Watson

Monolepsis pusilla Torr. [HC], orthographic variant

Micromonolepis is monotypic, and restricted to the western United States.

Neokochia [HC2]

Neokochia americana (S. Watson) G.L. Chu & S.C. Sand. [HC2]

green molly

Kochia americana S. Watson [FNA4, HC]

Nitrophila [FNA4, HC, HC2]

Botany (Fortieth Parallel). 297. 1871.

nitrewort

Nitrophila occidentalis (Moq.) S. Watson [FNA4, HC, HC2]

Botany (Fortieth Parallel). 297. 1871.

boraxweed

Possibly extirpated in WA, H&C say eastern WA. FNA4: "Nitrophila occidentalis often occurs with Distichlis, Juncus, and Sarcobatus."

Oxybasis [HC2]

goosefoot

Oxybasis chenopodioides (L.) S. Fuentes, Uotila & Borsch [HC2]

Willdenowia 42(1): 15. 2012.

low goosefoot, red goosefoot

Blitum chenopodioides L.

Chenopodium botryodes Sm.

Chenopodium chenopodioides (L.) Aellen [FNA4, HC]

The Linnaean basionym was neotypified (Uotila 2001). FNA4: "The name *Chenopodium botryodes* Smith was sometimes applied to *C. chenopodioides* because of uncertainty about the proper application and typification of the name *Blitum chenopodioides* Linnaeus. The recent publication by P. Uotila (2001) provides a reasonable solution by maintaining the traditional usage through neotypification of the Linnaean name."

***Oxybasis glauca* (L.) S. Fuentes, Uotila & Borsch [HC2]**

Willdenowia 42(1): 15. 2012.

glaucous goosefoot, oakleaf goosefoot

Chenopodium glaucum L. [FNA4, HC]

***ssp. *glauca* [HC2]**

oak-leaf goosefoot

Chenopodium glaucum L. var. *glaucum* [FNA4]

Recently (2015) collected in Franklin County; native to Eurasia.

ssp. *salina* (Standl.) Mosyakin [HC2]

Phytoneuron 2013-56: 5. 2013.

Rocky Mountain goosefoot

Chenopodium glaucum L. ssp. *salinum* (Standl.) Aellen

Chenopodium glaucum L. var. *salinum* (Standl.) B. Boivin [FNA4]

Chenopodium salinum Standl. [KZ99]

Taxonomy follows FNA.

****Oxybasis macrosperma* (Hook. f.) S. Fuentes, Uotila & Borsch [HC2]**

Willdenowia 42(1): 15. 2012.

large seed goosefoot

Chenopodium farinosum Standl.

Chenopodium macrospermum Hook. f. [FNA4]

Chenopodium macrospermum Hook. f. var. *farinosum* (S. Watson) J.T. Howell [KZ99]

Chenopodium macrospermum Hook. f. var. *halophilum* (Phil.) Aellen [KZ99]

Chenopodium murale L. var. *farinosum* S. Watson

FNA4: "*Chenopodium macrospermum* is native and diverse in South America. Much, if not all, of the North American material is introduced from there and appears to represent more than one part of the variation. Until a reliable treatment of the South American material is published we are not assigning names to the variants in North America."

***Oxybasis rubra* (L.) S. Fuentes, Uotila & Borsch [HC2]**

Willdenowia 42(1): 15. 2012.

red goosefoot

Chenopodium rubrum L. [FNA4, HC]

var. *humilis* (Hook.) Mosyakin [HC2]

Phytoneuron 2013-56: 4. 2013.

marshland goosefoot

Chenopodium humile Hook.

Chenopodium rubrum L. ssp. *humile* (Hook.) Aellen

Chenopodium rubrum L. var. *humile* (Hook.) S. Watson [FNA4, HC]

FNA4: *Chenopodium rubrum* var. *humile* has been treated as a species, variety, or form, or not recognized at all. It is native in western North America and introduced east of the plains. Sometimes it has been misidentified as *C. chenopodioides*. Patterns of distribution of these taxa in North America are in need of further study."

***var. *rubra* [HC2]**

red goosefoot

Chenopodium rubrum L. var. *rubrum* [FNA4, HC]

FNA4: "Hybrids between *Chenopodium rubrum* and *C. glaucum* are known as *C. xschulzeanum* Murr

and have been seen from waste areas in Illinois and Washington. These plants in general resemble *C. rubrum* with small, mealy leaves and horizontal seeds, but they also have some leaves shaped like those of *C. glaucum*."

**Polycnemum* [FNA4, HC2]

Sp. Pl. 1: 35. 1753; Gen. Pl. ed. 5. 22. 1754.

**Polycnemum arvense* L. [FNA4, HC2]

Sp. Pl. 1: 35. 1753.

Salicornia [FNA4, HC, HC2]

Sp. Pl. 1: 3. 1753; Gen. Pl. ed. 5. 4. 1754.

glasswort, saltwort, samphire

Salicornia depressa Standl. [FNA4, HC2]

N. Amer. Fl. 21: 85. 1916.

low saltwort

Salicornia europaea L. [HC], misapplied

Salicornia maritima S.L. Wolff & Jefferies [FNA4], misapplied

Salicornia virginica L. [HC]

H&C name *S. europaea* is misapplied. This is the common native annual species in coastal marshes. FNA suggests *S. virginica* may be the best name for this plant, if the Atlantic and Pacific populations are the same taxon. As with all our *Corispermum* taxa, for many decades this plant was mistakenly given the binomial and introduced status of a European species. FNA4: "*Salicornia depressa* is the common and widespread species in coastal areas of North America. No detailed taxonomic investigation of the tetraploid populations has ever been undertaken in North America. It is possible that a number of different taxa exist; the Pacific Coast populations in particular seem distinct from those of the Atlantic Coast. This species has generally been called *Salicornia europaea* by North American authors, but that name refers to a diploid European species that does not occur in North America. The earliest name that is probably referable to this species is *Salicornia virginica* Linnaeus, which must be typified by specimens collected by John Clayton probably from Virginia. The specimens are sterile but clearly annual, as indicated by Linnaeus in the protologue. The name was applied to an annual species by P. C. Standley (1916), but subsequently came to be misapplied to the perennial species of the east coast now treated in *Sarcocornia*."

Salicornia rubra A. Nelson [FNA4, HC, HC2]

Bull. Torrey Bot. Club. 26: 122. 1899.

red glasswort saltwort

Salicornia borealis S.L. Wolff & Jefferies

Salicornia rubra is known only from Okanogan Co. in Washington. FNA4: "*Salicornia rubra* is very similar to the Eurasian species *S. prostrata* Pallas, which occurs in very similar inland habitats. No direct comparison of these two species has been possible and it is not at all clear how they differ from each other."

**Salsola* [FNA4, HC, HC2]

Sp. Pl. 1: 222. 1753; Gen. Pl. ed. 5, 104. 1754.

Russian thistle

**Salsola tragus* L. [FNA4, HC2]

Cent. Pl. II. 13. 1756.

Russian thistle, tumbleweed

Salsola australis R. Br.

Salsola iberica (Sennen & Pau) Botsch. ex Czerepanov

Salsola kali L. [FNA4, HC, HC2], misapplied

Salsola kali L. var. *tenuifolia* Tausch ex Moq. [VPPNW2]

Salsola pestifer A. Nelson

Salsola kali L. subsp. *pontica* (Pall.) Mosyakin has been collected in Multnomah Co., Oregon, and may be found in Washington. Recent molecular work may change the nomenclature again (Ryan & Ayers 2000). FNA4: "*Salsola tragus* probably was introduced to South Dakota in 1870 or 1874 in flaxseed imported from Russia (J. C. Beatley 1973c; C. W. Crompton and I. J. Bassett 1985; S. L. Mosyakin 1996). Now this

noxious weed occupies almost all of its potential range in North America. It seems, however, to be quite rare in the southeastern part of the United States. *Salsola tragus* has been known in North American and European botanical literature under numerous names (for detailed synonymy see S. L. Mosyakin 1996 and S. Rilke 1999). Judging from the photographs of the Linnaean specimen of *S. tragus* (LINN 315.3), which should be regarded as a lectotype, it is the correct name for the widespread, narrow-leaved, weedy representative of the *S. kali* aggregate (Å. Degen 1936-1938, vol. 2; N. N. Tzvelev 1993; S. L. Mosyakin 1996; S. Rilke 1999). In the present circumscription, *Salsola tragus* is an extremely polymorphic species consisting of several more or less distinct races (subspecies or segregate species). Several varieties may be recognized within *S. tragus*, many of them are just morphological variants of little or no taxonomic value. Studies using allozymes and DNA-based molecular markers in some North American and Eurasian representatives of *Salsola tragus* indicate that there are at least two cryptic genetically divergent populations (F. J. Ryan and D. R. Ayres 2000). More studies may clarify distribution, origin, and taxonomic status of these infraspecific taxa (or cryptic species). In spite of being a noxious weed, *Salsola tragus* is an additional forage source for livestock in arid rangelands. The mature plant may break off at the stem base to form a tumbleweed."

***Sarcocornia* [WTU]**

Bot. J. Linn. Soc. 75: 366. 1978.

****Spinacia* [FNA4, HC, HC2]**

Sp. Pl. 2: 1027. 1753; Gen. Pl. ed. 5, 452. 1754.

****Spinacia oleracea* L. [FNA4, HC, HC2]**

Sp. Pl. 2: 1027. 1753.

spinach

Spinacia oleracea L. var. *inermis* Peterm.

Spinacia oleracea L. var. *oleracea*

Known in Washington from a single historic collection collected in a cultivated setting. Not considered part of the flora until specimens are deposited indicating that it is naturalized. FNA4: "Reports of populations in Canada and inland areas of the United States appear to be from gardens where the plants do not persist without benefit of cultivation. Spinach is an important and widely cultivated crop of unknown origin, though known from the Mediterranean region since ancient times. The plant is prized as a rich source of vitamins, calcium, iron, and antioxidant carotenoids, but, if ingested in excessive amounts, the high concentration of oxalates in the leaves can be toxic by inhibiting the absorption of calcium. The cultivated form named var. *oleracea* has spiny seeds and tends to be more cold hardy than var. *inermis*, the smooth-seeded variety that is more tolerant of warm weather."

***Suaeda* [FNA4, HC, HC2]**

Onomat. Bot. Compl. 8: 797. 1776.

[name conserved]

seablite

***Suaeda calceoliformis* (Hook.) Moq. [FNA4, HC2]**

Chenop. Monogr. Enum. 128. 1840.

paiuteweed, common seablite, horned seablite, pahute weed

Chenopodium calceoliformis Hook.

Suaeda americana (Pers.) Fernald

Suaeda depressa (Pursh) S. Watson [HC], misapplied

Suaeda depressa (Pursh) S. Watson var. *erecta* S. Watson

Suaeda maritima (L.) Dumort. [FNA4, HC, HC2], misapplied

Suaeda maritima (L.) Dumort. ssp. *maritima*, misapplied

Found in coastal salt marshes and inland. Similar to *Suaeda occidentalis*, differing only in floral bracts and branching pattern. McNeill et al. (1977) discuss the misapplication of the name *Suaeda depressa* for this plant. FNA4: "The name *Suaeda depressa* has been misapplied to this species (J. McNeill et al. 1977). In the northeastern part of its range, *S. calceoliformis* was long known as *S. americana*, but the two were found to be conspecific (I. J. Bassett and C. W. Crompton 1978). *Suaeda calceoliformis* can easily be confused with *S. occidentalis*, with which it is sympatric in the Great Basin; see comments under *S. occidentalis*. Plants of the annual Mexican seepweed, *S. mexicana* (Standley) Standley also are similar to

S. calceoliformis, but are more or less shiny, yellowish or light brown, and have opposite leaves at the base and alternate ones distally. *Suaeda mexicana* has been reported once (in 1895) from El Paso County, Texas, but no specimens have been located to substantiate the report."

***Suaeda nigra* (Raf.) J.F. Macbr. [FNA4, HC, HC2]**

Contr. Gray Herb. 56: 50. 1918.

bushy seablite seepweed

Suaeda fruticosa (L.) Forssk., misapplied

Suaeda intermedia S. Watson [HC]

Suaeda moquinii (Torr.) Greene [KZ99]

Suaeda torreyana S. Watson [Abrams]

FNA4: "*Suaeda nigra* is the correct name for the species previously known as *Suaeda moquinii*. The type specimen was collected in 1820 by Edwin James along the Canadian River in the Texas panhandle. J. Torrey (1827) tentatively identified it as "*Chenopodium maritimum* L. ?". Rafinesque named it *Chenopodium nigrum*, long before Torrey's publication of the name *Chenopodium moquinii* in 1856. C. O. Hopkins and W. H. Blackwell (1977) suggested that the name *Chenopodium nigrum* was both a nomen nudum and a superfluous name. But the publication of that name included a clear reference to Torrey's 1832 publication, which means that the name was not a nomen nudum, and the specimen belonged to a new species, which means that the name was not superfluous. "*Suaeda fruticosa*" with the incorrect author combination (Linnaeus) Forsskål has been misapplied to this species (H. J. Schenk and W. R. Ferren Jr. 2001). *Suaeda nigra* exhibits much phenotypic plasticity, as well as genetic variability, and is wide ranging. This combination has resulted in the naming of many variants that often reflect a response to localized or regional habitat conditions such as degree of wetness, salinity, or freezing temperatures (C. O. Hopkins and W. H. Blackwell 1977). In California and adjacent states, for example, glabrous plants (*S. torreyana* var. *torreyana*) and pubescent plants (*S. torreyana* var. *ramosissima*) occur throughout the distribution of the species. In California it is coastal but not estuarine in the San Francisco Bay area and in Orange and San Diego counties. Plants of northern latitudes or higher elevations that are prone to freezing tend to have annual stems from a woody base. Plants that occur in more southern or milder conditions are usually shrubs with perennial stems. Plants in seasonally flooded wetlands tend to be facultative annuals. In the western and northern part of the range, most plants of *Suaeda nigra* are glabrous or sparsely pubescent and more or less long leaved."

***Suaeda occidentalis* (S. Watson) S. Watson [FNA4, HC, HC2]**

Proc. Amer. Acad. Arts. 9: 90. 1874.

slender seablite, western seepweed

Schoberia occidentalis S. Watson

Found in saline situations east of the Cascades. FNA4: "This species is easily confused with *Suaeda calceoliformis*, which occurs throughout its range. There are virtually no differences in floral characters. Bracts of *S. occidentalis* often appear thin-margined at the base in dried specimens but not in fresh material, whereas bracts of *S. calceoliformis* have visible membranous margins in both. Differences in bract and branching characteristics are usually distinct in fresh specimens. Larger specimens of *S. occidentalis* are usually branched throughout, with the spreading branches resulting in a more-or-less spherical shape of the plant. The mostly ascending branches of the more-erect *S. calceoliformis* tend to be concentrated in the upper half of the main stems, with primary branches sometimes arising from the base, and therefore creating a candelabrum shape of the plant."

Chenopodiaceae: see Amaranthaceae