ATLAS OF THE FLORA OF NEW ENGLAND: CARYOPHYLLIDAE

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ABSTRACT. Dot maps are provided to depict the distribution at the county level of the taxa of Caryophyllidae growing outside of cultivation in the six New England states of the northeastern United States. Of the 263 taxa treated (species, subspecies, varieties, and hybrids, but not forms), 261 are mapped based primarily on specimens in major herbaria of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut, with most data derived from the holdings of the New England Botanical Club Herbarium (NEBC). Brief synonymy to account for names used in standard manuals and floras for the area, habitat, chromosome information, and common names are also provided.

Key Words: flora, New England, atlas, distribution, Caryophyllidae

This article is the eighth in a series (Angelo and Boufford, 1996, 1998, 2000, 2007, 2010, 2011a, 2011b) that will present the distributions of the vascular flora of New England in the form of dot distribution maps at the county level (Figure 1). The atlas is posted on the internet at http://neatlas.org, where it will be updated as new information becomes available.

This project encompasses all vascular plants (pteridophytes and spermatophytes) at the rank of species, subspecies, and variety growing independent of cultivation in the six New England states. Hybrids are also included, but forms and other ranks below the level of variety are not. The dots are based on voucher specimens primarily in New England herbaria (of colleges, universities, botanical gardens, and public museums) representing reproducing populations outside of cultivated habitats. This eighth installment includes the families in subclass Caryophyllidae. For convenience, these are the families treated in Flora of North America, Volumes 4 and 5 (Flora of North America Editorial Committee 2003, 2005). Of the 263 taxa we treat, 169, a surprising 64 percent, are not native to the region. Future accounts will treat the distribution of additional non-monocot angiosperms.

The habitat data are distillations from a variety of sources augmented by our own field observations. An attempt was made to indicate habitat information as it applies to a particular taxon in
New England rather than to the entire range of the taxon. Such information is omitted where habitat is not indicated on the specimen label and where we also lack personal knowledge of the plant in New England. Omissions of habitat information are for a few introduced taxa and for all hybrids.
We plan to gather this series of articles, together with additional background material, into a separate volume upon completion of all the installments. It is our hope, in the meantime, that these articles will stimulate additional field work to supplement the distributions portrayed in the maps. The New England Botanical Club herbarium has proven to be the most important resource for this project. We are eager to receive information on voucher specimens in public herbaria documenting range extensions and filling county gaps in distributions. Similarly, because the atlas of the New England flora will be continuously updated as new information becomes available, we are eager to receive notification of published corrections of cytological information and new, documented chromosome counts for taxa in the New England flora.

MATERIALS AND METHODS

Materials and methods are as outlined in Angelo and Boufford (1996) and are not repeated here. They can also be found at http://neatlas.org/Intro-Pterid&Gym.html (Atlas of the Flora of New England: Pteridophytes and Gymnosperms, R. Angelo and D. E. Boufford).

TAXONOMY AND FORMAT

The taxonomy and nomenclature adopted for this work essentially follow that of the Flora of North America project in progress, except that families, genera, and species are arranged alphabetically. The families and their circumscription do not necessarily reflect current views on relationships or composition. The Angiosperm Phylogeny Website (Stevens 2001 onwards) should be consulted for a continuously updated treatment of families and their inclusive genera. Named and unnamed hybrid taxa are placed alphabetically at the end of the genus in which they occur. Unnamed hybrids combine the names of the progenitors alphabetically by epithet. Taxa that are not native to New England are indicated by uppercase text. Unpublished names are not used, even if publication is pending.

Chromosome numbers are taken primarily from Flora of North America, Volumes 4 and 5 (Flora of North America Editorial Committee 2003, 2005) and from Missouri Botanical Garden’s Index to Plant Chromosome Numbers [website (http://www.tropicos.org/NameSearch.aspx?projectid=9); St. Louis, MO].
Synonymy is provided primarily with respect to names accepted in standard manuals covering New England published from 1950 onward, including Fernald (1950), Gleason (1952), Gleason and Cronquist (1991), and Seymour (1982). Synonyms have not been provided where the distribution for the synonymized name does not include New England.

The following list (which includes excluded taxa) will aid readers in finding familiar names that have been transferred to other taxa:

- **Acnida** => **Amaranthus**
- **Arenaria** (in part) => **Honckenya**
- **Arenaria** (in part) => **Minuartia**
- **Arenaria** (in part) => **Moehringia**
- **Atocion** => **Silene**
- **Bassia** (in part) => **Kochia**
- **Chenopodium** (in part) => **Dysphania**
- **Eudianthe** => **Silene**
- **Lychnis** => **Silene**
- **Montia** (in part) => **Claytonia**
- **Polygonum** (in part) => **Bistorta**
- **Polygonum** (in part) => **Fallopia**
- **Polygonum** (in part) => **Persicaria**
- **Salicornia** (in part) => **Sarcocornia**
- **Saponaria** (in part) => **Vaccaria**
- **Silene** (in part) => **Saponaria**
- **Stellaria** (in part) => **Myosoton**
- **Talinum** => **Phemeranthus**

The following species are reported from our area, but no voucher specimens were located, or the substantiating specimens were misidentified, or the voucher specimen is in question, or the taxa were excluded for other reasons noted:

- **Amaranthus dubius** Martius ex Thellung [no specimen located; reported from Massachusetts at a boat landing, in Ann. Missouri Bot. Gard. 37: 607 (1950) by J. D. Sauer, but no specimen cited]

- **Atriplex heterosperma** Bunge [no specimen located; reported from Maine in Flora of North America Editorial Committee (2003)]

- **Atriplex pentandra** (Jacquin) Standley [no specimen located; reported from Massachusetts and Connecticut in Flora of North America Editorial Committee (2003), but possibly these reports are for the very closely related *Atriplex mucronata* Rafinesque]
Atriplex sibirica Linnaeus [no specimen located; reported from Worcester Co., Massachusetts in Rhodora 71: 580 (1969)]

Cerastium diffusum Persoon [no specimen located; cited by Sorrie and Somers (1999) from Middlesex Co., Massachusetts, but voucher not located by us, nor later by Sorrie (2005)]

Cerastium velutinum Rafinesque var. velutinum [no specimen located; reported from Massachusetts in Flora of North America Editorial Committee (2005)]

Chenopodium desiccatum A. Nelson [no specimen located; reported from several New England states under the synonym C. pratericola Rydberg var. oblongifolium (S. Watson) Wahl, but, if vouchers exist, they are probably misidentifications of typical C. pratericola]

Chenopodium opulifolium Schrader ex W.D.J. Koch & Ziz [no specimen located; reported from Massachusetts and Rhode Island in early 20th century literature]

Chenopodium watsonii A. Nelson [no specimen located; reported from York Co., Maine]

Claytonia sibirica Linnaeus [The voucher specimen collected from a residential yard from Essex Co., Massachusetts is not accepted as evidence for establishment in the wild.]

Corispermum americanum (Nuttall) Nuttall var. americanum [no specimen located; reported from Massachusetts]

Corrigiola litoralis Linnaeus subsp. litoralis [no specimen located and deemed not established in the wild; reported from Massachusetts as a garden weed (Sorrie 2005)]

Froelichia arizonica Thornber ex Standley [The voucher specimen from Suffolk Co., Massachusetts has been reidentified as Froelichia gracilis (Hooker) Moquin-Tandon.]

Gypsophila repens Linnaeus [The voucher specimen collected by a non-botanist in 1900 from York Co., Maine (NEBC), with no habitat information, is not accepted as evidence for establishment in the wild.]

Illecebrum verticillatum Linnaeus [no specimen located and deemed not established in the wild; reported from Middlesex Co., Massachusetts as a weed in a nursery in Flora of North America Editorial Committee (2005)]
Paronychia fastigiata (Rafinesque) Fernald var. nuttallii (Small) Fernald [reported from Sagadahoc Co., Maine; no specimens located in herbaria that are the basis for this atlas]

Persicaria chinensis (Linnaeus) H. Gross [no specimen located; reported from Massachusetts in Flora of North America Editorial Committee (2005)]

Phemeranthus teretifolius (Pursh) Rafinesque [no specimen located; reported from Connecticut]

Polycnemum majus A. Braun ex Bogenhard [no specimen located; reported from Coös Co., New Hampshire in Rhodora 69: 31 (1967)]

Polygonum oxyspermum C.A. Meyer & Bunge ex Ledebour subsp. raii (Babington) D.A. Webb & Chater [no specimen located; reported from Maine]

Rumex conglomeratus Murray [no specimen located; reported from Massachusetts in Flora of North America Editorial Committee (2005)]

Rumex sanguineus Linnaeus [no specimen located; reported from Connecticut]

Salicornia rubra A. Nelson [no specimen located; reported from Connecticut]

Silene coeli-rosa (Linnaeus) Godron [The voucher specimen collected as a garden weed from Middlesex Co., Massachusetts (NEBC) is not accepted as evidence for establishment in the wild.]

Spergularia diandra (Gussone) Heldreich [identity of voucher in doubt; this record is based on a specimen from Barnstable Co., Massachusetts (NEBC) cited by Ruth Rossbach in Rhodora 42: 83 (1940), in which uncertainty of its identity is expressed. Rossbach annotated the herbarium sheet as “Spergularia purpurea (Persoon) G. Don ?” in 1937.]

Spergularia media (Linnaeus) C. Presl var. media [voucher specimens from Maine and Massachusetts were misidentified; no other New England vouchers found]

Spergularia purpurea (Persoon) G. Don [identity of voucher is in doubt; this record is based on the same specimen cited as Spergularia diandra (Gussone) Heldreich, which is excluded as explained above]
Stellaria longipes Goldie subsp. longipes [no specimen located; reported from Maine]

Stellaria palustris Ehrhart ex Hoffmann [no specimen located; reported from Knox Co., Maine]

ANGIOSPERMAE (MAGNOLIOPHYTA)—ANGIOSPERMS

DICOTYLEDONEAE (CARYOPHYLLIDAE)

AIZOACEAE

TETRAGONIA TETRAGONOIDES (Pallas) Kuntze—New Zealand Spinach (Figure 2). 2n = 32. Waste places. From eastern Asia, Australia, New Zealand, Pacific Islands.

AMARANTHACEAE

ALTERNANTHERA PUNGENS Kunth—Khakiweed (Figure 2). 2n = ? Waste places. From West Indies, South America.

AMARANTHUS ALBUS Linnaeus—Tumbleweed (Figure 2). 2n = 32. Waste places, disturbed ground, roadsides. From tropical America. [A. GRAECIZANS Linnaeus, misapplied]

AMARANTHUS BLITOIDES S. Watson—Matweed (Figure 2). 2n = 32. Waste places, disturbed ground, roadsides. From farther west. [A. GRAECIZANS Linnaeus, misapplied]

AMARANTHUS BLITUM Linnaeus—Purple Amaranth (Figure 3). 2n = 34. Waste places. From tropical America, Eurasia, Africa. [A. ASCENDENS Loiseleur; A. LIVIDUS Linnaeus]

Amaranthus cannabinus (Linnaeus) J.D. Sauer—Saltmarsh Hemp (Figure 3). 2n = ? Tidal shores of rivers, salt marshes. [Acnida cannabina Linnaeus]

AMARANTHUS CAUDATUS Linnaeus—Love-lies-bleeding (Figure 3). 2n = 32. Waste places. From tropical America.

AMARANTHUS CRUENTUS Linnaeus—Blood Amaranth (Figure 3). 2n = 32, 34. Waste places, roadsides. From Central America.

AMARANTHUS DEFLEXUS Linnaeus—Argentina Amaranth (Figure 4). 2n = 34. Waste places. From South America.
Amaranthus hybridus Linnaeus—Smooth Amaranth (Figure 4). 2n = 17, 32, 33, 34. Waste places, fallow fields, roadsides, disturbed ground.

AMARANTHUS HYPOCHONDRIACUS Linnaeus—Prince’s-feather (Figure 4). 2n = 16, 32. Near cultivated places. From cultivation in southwestern North America.

AMARANTHUS PALMERI S. Watson—Palmer’s Amaranth (Figure 4). 2n = 34. Waste places near woolen mills, railroads. From farther southwest.

AMARANTHUS POWELLII S. Watson—Powell’s Amaranth (Figure 5). 2n = 32, 34. Waste places. From farther west.

Amaranthus pumilus Rafinesque—Sea-beach Amaranth (Figure 5). 2n = ? Sea beaches, mostly on foredunes at high tide level.

Amaranthus retroflexus Linnaeus—Redroot (Figure 5). 2n = 32, 34. Roadsides, waste places, disturbed ground.

AMARANTHUS SPINOSUS Linnaeus—Thorny Amaranth (Figure 5). 2n = 34. Waste places. From tropical America.

AMARANTHUS TUBERCULATUS (Moquin-Tandon) J.D. Sauer—Tall Water-hemp (Figure 6). 2n = 32. Waste places. From farther west. [A. TUBERCULATUS var. PROSTRATUS (Uline & W.L. Bray) B.L. Robinson; A. TUBERCULATUS var. SUBNUDUS S. Watson; A. RUDIS J.D. Sauer; ACNIDA ALTISSIMA Riddell ex Moquin-Tandon var. ALTISSIMA; A. ALTISSIMA var. PROSTRATA (Uline & W.L. Bray) Fernald]

AMARANTHUS VIRIDIS Linnaeus—Green Amaranth (Figure 6). 2n = 34. Waste places. From South America. [A. GRACILIS Desfontaines ex Poiret]

—Amaranthus hybrids—

Amaranthus hybridus Linnaeus × A. TUBERCULATUS (Moquin-Tandon) J.D. Sauer—(Figure 6).

Amaranthus retroflexus Linnaeus × A. TUBERCULATUS (Moquin-Tandon) J.D. Sauer—(Figure 6).

CELOSIA CRISTATA Linnaeus—Cultivated Cockscomb (Figure 7). 2n = 72. Waste places. From cultivation. [C. ARGENTEA Linnaeus var. CRISTATA (Linnaeus) Kuntze]
FROELICHIA GRACILIS (Hooker) Moquin-Tandon—Slender Cottonweed (Figure 7). $2n = 54$. Waste places, roadsides, railroads, especially in sandy soil. From farther west.

GOMPHRENA GLOBOSA Linnaeus—Common Globe-amaranth (Figure 7). $2n = 32, 40, 42, 44, 45–48$. Waste places. From southern Asia.

CACTACEAE

Opuntia humifusa (Rafinesque) Rafinesque var. humifusa—Eastern Prickly-pear (Figure 7). $2n = 22, 44$. Dry, exposed ledges and sandy fields.

CARYOPHYLLACEAE

AGROSTEMMA GITHAGO Linnaeus var. GITHAGO—Common Corn-cockle (Figure 8). $2n = 48$ (Europe). Waste places, fields, roadsides. From Eurasia, northern Africa.

ARENARIA SERPYLLIFOLIA Linnaeus var. SERPYLLIFOLIA—Thyme-leaved Sandwort (Figure 8). $2n = 40, 44?$ (both Europe). Dry ledges, often limestone, dry, sterile fields, roadsides. From Eurasia, northern Africa.

ARENARIA SERPYLLIFOLIA Linnaeus var. TENUIOR Mertens & W.D.J. Koch—Thyme-leaved Sandwort (Figure 8). $2n = 20$ (Europe). Dry ledges, often limestone, dry, sterile fields, roadsides. From Eurasia, northern Africa.

CERASTIUM ARVENSE Linnaeus subsp. ARVENSE—Field Chickweed (Figure 8). $2n = 72$. Fields, roadsides, shores, cemeteries. From western Europe.

Cerastium arvense Linnaeus subsp. strictum Gaudin—Field Chickweed. $2n = 36$. Cliffs, gravel, roadsides, favoring basic soils. [C. arvense var. viscidulum Gremli; this taxon is not mapped because it is not usually separated from the typical subspecies in New England herbaria]

CERASTIUM FONTANUM Baumgarten subsp. VULGARE (Hartman) Greuter & Burdet—Common Mouse-ear (Figure 9). $2n = ca. 122–152$, usually 144. Fields, waste places, roadsides. From Eurasia. [C. VULGATUM Linnaeus, misapplied]

CERASTIUM GLOMERATUM Thuillier—Sticky Mouse-ear (Figure 9). $2n = 72$. Waste places, fields, roadsides. From Europe. [C. VISCOSUM Linnaeus, misapplied]
Cerastium nutans Rafinesque var. nutans—Nodding Chickweed (Figure 9). 2n = 36. Moist ledges, rich hillsides, alluvium, calcareous rocks.

CERASTIUM PUMILUM Curtis—European Chickweed (Figure 9). 2n = 72. Dry, sandy fields and roadsides. From Eurasia.

CERASTIUM SEMIDEICANDRUM Linnaeus—Little Mouse-ear (Figure 10). 2n = 36. Dry, sandy fields and roadsides. From Eurasia.

CERASTIUM TOMENTOSUM Linnaeus—Snow-in-summer (Figure 10). 2n = 72. Roadsides, riverbanks, old fields. From southeastern Europe. [C. BIEBERSTEINII de Candolle, misidentified]

DIANTHUS ARMERIA Linnaeus subsp. ARMERIA—Deptford Pink (Figure 10). 2n = 30 (Europe). Roadsides, dry, grassy fields. From Eurasia.

DIANTHUS BARBATUS Linnaeus subsp. BARBATUS—Sweet William (Figure 10). 2n = 30 (Europe). Waste places, roadsides, fields. From Europe.

DIANTHUS CARTHUSIANORUM Linnaeus—Clusterhead Pink (Figure 11). 2n = 30, 60 (Europe). Disturbed ground, fields. From Europe.

DIANTHUS CARYOPHYLLUS Linnaeus—Clove Pink (Figure 11). 2n = 30. From Mediterranean region.

DIANTHUS DELTOIDES Linnaeus subsp. DELTOIDES—Maiden Pink (Figure 11). 2n = 30 (Europe). Fields, roadsides, waste places. From Europe.

DIANTHUS PLUMARIUS Linnaeus subsp. PLUMARIUS—Garden Pink (Figure 11). 2n = 30, 60, 90 (all Europe). Dry, sandy fields, roadsides. From eastern Europe.

GYPSOPHILA ELEGANS M. Bieberstein—Annual Baby’s-breath (Figure 12). 2n = 26, 34 (Europe). Waste places, roadsides. From Eurasia.

GYPSOPHILA MURALIS Linnaeus—Low Baby’s-breath (Figure 12). 2n = 30, 34 (both Europe). Waste places, roadsides, fields, cemeteries. From Europe.

GYPSOPHILA PANICULATA Linnaeus—Tall Baby’s-breath (Figure 12). 2n = 34, 68 (both Europe). Waste places, sandy roadsides, fields. From Eurasia.
GYPSOPHILA PERFOLIATA Linnaeus—(Figure 12). $2n = ?$ Sea beaches, roadsides. From Eurasia.

GYPSOPHILA SCORZONERIFOLIA Seringe—Garden Baby’s-breath (Figure 13). $2n = 68$ (Europe). Beaches, roadsides, disturbed ground. From Europe.

HERNIARIA GLABRA Linnaeus—Green-carpet (Figure 13). $2n = 18, 36, 72$ (Europe), 54 (Africa). Roadsides, waste places. From Eurasia.

HERNIARIA HIRSUTA Linnaeus var. HIRSUTA—Hairy Rupturewort (Figure 13). $2n = 18, 36$ (Europe). Roadsides, sandy flats. From Europe, southwestern Asia, northern Africa.

HOLOSTEUM UMBELLATUM Linnaeus subsp. UMBELLATUM—Jagged Chickweed (Figure 13). $2n = 20, 40$ (both Europe). Fields, roadsides, waste places. From Mediterranean region, southwestern Asia.

Honckenya peploides (Linnaeus) Ehrhart subsp. robusta (Fernald) Hultén—Seabeach Sandwort (Figure 14). $2n = ?$ Sea beaches, dunes above high tide. [Arenaria peploides Linnaeus var. robusta Fernald]

Minuartia caroliniana (Walter) Mattfeld—Pine-barren Sandwort (Figure 14). $2n = ?$ Dry, open, sandy soil. [Arenaria caroliniana Walter]

Minuartia glabra (Michaux) Mattfeld—Appalachian Stitchwort (Figure 14). $2n = 20$. Siliceous, wooded outcrops. [Arenaria groenlandica (Retzius) Sprengel var. glabra (Michaux) Fernald]

Minuartia groenlandica (Retzius) Ostenfeld—Mountain Sandwort (Figure 14). $2n = 20$. Granitic ledges. [Arenaria groenlandica (Retzius) Sprengel var. groenlandica]

Minuartia marcescens (Fernald) House—Serpentine Sandwort (Figure 15). $2n = ?$ Magnesium ledges. [Arenaria marcescens Fernald]

Minuartia michauxii (Fenzl) Farwell—Rock Sandwort (Figure 15). $2n = 30?, 44$. Dry, calcareous ledges. [M. stricta (Swartz) Hiern; Arenaria stricta Michaux]

Minuartia rubella (Wahlenberg) Hiern—Boreal Sandwort (Figure 15). $2n = 24$. Calcareous rocks. [Arenaria rubella (Wahlenberg) Smith]
Moehringia lateriflora (Linnaeus) Fenzl—Grove Sandwort (Figure 15).  
2n = 48. Woods, meadows, gravelly shores. [Arenaria lateriflora Linnaeus]

Moehringia macrophylla (Hooker) Fenzl—(Figure 16). 2n = 48.  
Shaded ledges in humus, often with Hypnum, chiefly in magnesium or basic areas. [Arenaria macrophylla Hooker]

MYOSOTON AQUATICUM (Linnaeus) Moench—Water Chickweed (Figure 16). 2n = 20? (Asia), 28 (Europe, Asia), 29 (Europe). Stream banks, meadows, alluvial woods. From Eurasia. [Stellaria aquatica (Linnaeus) Scopoli]

Paronychia argyrocoma (Michaux) Nuttall—Silverling (Figure 16).  
2n = ? Bare, granitic, mountain slopes, ledges. [P. argyrocoma var. albimontana Fernald]

Paronychia canadensis (Linnaeus) Alphonso Wood—Smooth Forked Chickweed (Figure 16). 2n = ? Rich, rocky woods, sandy clearings, waste places.

Paronychia fastigiata (Rafinesque) Fernald var. fastigiata—Hairy Forked Chickweed (Figure 17). 2n = ? Dry woods, rocky or sandy openings, waste places.

PETRORHAGIA PROLIFERA (Linnaeus) P.W. Ball & Heywood—Childing Pink (Figure 17). 2n = 30 (Europe). Roadsides, ballast, fields. From Eurasia.

PETRORHAGIA SAXIFRAGA (Linnaeus) Link var. SAXIFRAGA—Tunic-flower (Figure 17). 2n = 30, 60 (both Europe). Roadsides, sandy, waste places. From Eurasia.

POLYCARPON TETRAPHYLLUM (Linnaeus) Linnaeus subsp. TETRAPHYLLUM—(Figure 17). 2n = 32, 48, ca. 64. Waste places. From Mediterranean region.

Sagina decumbens (Elliott) Torrey & A. Gray subsp. decumbens—Trailing Pearlwort (Figure 18). 2n = 36. Dry, sandy soil, roadsides, sidewalk cracks.

SAGINA JAPONICA (Swartz) Ohwi—Japanese Pearlwort (Figure 18).  
2n = 46. Dryish, waste places. From eastern Asia.

SAGINA MAXIMA A. Gray subsp. MAXIMA—Beach Pearlwort (Figure 18). 2n = ? Rocky shores, gravelly beaches. From farther west.

SAGINA NODOSA (Linnaeus) Fenzl subsp. NODOSA—Knotted Pearlwort (Figure 18). 2n = 56. Moist, coastal ledges and rock
crevices. From Europe. [S. NODOSA var. PUBESCENS (Besser) Mertens & W.D.J. Koch]

*Sagina nodosa* (Linnaeus) Fenzl subsp. borealis G.E. Crow—Knotted Pearlwort (Figure 19). 2n = 56. Moist, coastal ledges and rock crevices.

*SAGINA PROCUMBENS* Linnaeus—Matted Pearlwort (Figure 19). 2n = 22. Moist, gravelly or sandy roadsides, sidewalk cracks, rocky or sandy shores, sea cliffs. From Europe.

*SAPONARIA OCYMOIDES* Linnaeus—Rock Soapwort (Figure 19). 2n = 28 (Europe). Waste places. From Europe.

*SAPONARIA OFFICINALIS* Linnaeus—Bouncing-bet (Figure 19). 2n = 28. Roadsides, waste places, fields. From Eurasia.

*SAPONARIA PUMILIO* (Linnaeus) Fenzl ex A. Braun—Pygmy Pink (Figure 20). 2n = ? Ledges. From Europe. [SILENE PUMILIO* (Linnaeus) Wulfen]

*SCLERANTHUS ANNUUS* Linnaeus subsp. ANNUUS—Annual Knawel (Figure 20). 2n = 44 (Europe). Roadsides, waste places, dry, sandy soil. From Eurasia, northern Africa.

*SCLERANTHUS PERENNIS* Linnaeus subsp. PERENNIS—Perennial Knawel (Figure 20). 2n = 22 (Europe). Roadsides, dry, sandy soil. From Eurasia.

*Silene acaulis* (Linnaeus) Jacquin—Moss Campion (Figure 20). 2n = 24. Alpine areas. [S. acaulis var. exscapa (Allioni) F.N. Williams]

*Silene antirrhina* Linnaeus—Sleepy Catchfly (Figure 21). 2n = 24. Dry, sandy or rocky soil, railroads, fields, waste places.

*SILENE ARMERIA* Linnaeus—Garden Catchfly (Figure 21). 2n = 48. Waste places, roadsides. From Eurasia. [ATOCION ARMERIA* (Linnaeus) Rafinesque]

*Silene caroliniana* Walter subsp. pensylvanica (Michaux) R.T. Clausen—Wild Pink (Figure 21). 2n = 48. Dry, often rocky, mainly deciduous woods and clearings.

*SILENE CHALCEDONICA* (Linnaeus) E.H.L. Krause—Maltesecross (Figure 21). 2n = 24 (Europe). Roadsides, near habitations, waste places, open woods. From Eurasia. [LYCHNIS CHALCEDONICA* Linnaeus]
SILENE CONICA Linnaeus subsp. CONICA—Sand Catchfly (Figure 22). $2n = 20$ (Europe). Sandy fields and roadsides. From Eurasia.

SILENE CORONARIA (Linnaeus) Clairville—Mullein Pink (Figure 22). $2n = 24$. Waste places, roadsides, fields. From Europe. [LYCHNIS CORONARIA (Linnaeus) Desrousseaux]

SILENE CSEREII Baumgarten—Balkan Catchfly (Figure 22). $2n = 24$. Waste places, roadsides, railroads. From Europe.

SILENE DICHOTOMA Ehrhart subsp. DICHOTOMA—Forked Catchfly (Figure 22). $2n = 24$. Fields, roadsides, waste places. From Europe.

SILENE DIOICA (Linnaeus) Clairville—Red Campion (Figure 23). $2n = 24$. Fields, roadsides, waste places. From Europe. [LYCHNIS DIOICA Linnaeus]

SILENE FLOS-CUCULI (Linnaeus) Clairville subsp. FLOS-CUCULI—Ragged Robin (Figure 23). $2n = 24$. Wet fields, meadows, roadside ditches. From Europe. [LYCHNIS FLOS-CUCULI Linnaeus]

SILENE GALlica Linnaeus—French Catchfly (Figure 23). $2n = 24$. Waste places, roadsides. From Europe.

SILENE LATIFOLIA Poiret—White Campion (Figure 23). $2n = 24$. Waste places, roadsides, field borders. From Eurasia. [S. LATIFOLIA subsp. ALBA (Miller) Greuter & Burdet; S. PRATENSIS (Rafinesque) Grenier & Godron; LYCHNIS ALBA Miller]

SILENE NIVEA (Nuttall) Muhlenberg ex Otth—Snowy Campion (Figure 24). $2n = 48$. Rich, shaded riverbanks. From farther west and south.

SILENE NOCTIFLORA Linnaeus—Night-flowering Catchfly (Figure 24). $2n = 24$. Arable land, waste places. From Europe.

SILENE NUTANS Linnaeus—Nottingham Catchfly (Figure 24). $2n = 24$. Roadsides. From Eurasia.

SILENE PENDULA Linnaeus—Nodding Catchfly (Figure 24). $2n = 24$ (Europe). Roadsides, fields. From Europe.

Silene stellata (Linnaeus) W.T. Aiton—Starry Campion (Figure 25). $2n = (34), 48$. Dry, open woods.
SILENE VISCARIA (Linnaeus) Jessen subsp. VISCARIA—German Catchfly (Figure 25). 2n = 24 (Europe). Roadsides, waste places, thickets, fields. From Europe. [LYCHNIS VISCARIA Linnaeus; VISCARIA VULGARIS Bernhardii]

SILENE VULGARIS (Moench) Garcke subsp. VULGARIS—Bladder Campion (Figure 25). 2n = 24. Waste places, roadsides, field borders. From Europe. [S. CUCUBALUS Wibel; S. LATIFOLIA (Miller) Britten & Rendle]

—Silene hybrid—

SILENE × HAMPEANA Meusel & K. Werner—(Figure 25). [S. DIOICA (Linnaeus) Clairville × S. LATIFOLIA Poiret]

SPERGULA ARVENSIS Linnaeus—Corn Spurrey (Figure 26). 2n = 18, 36 (both Europe). Roadsides, fallow fields. From Eurasia. [S. ARVENSIS var. SATIVA (Boenninghausen) Mertens & W.D.J. Koch]

SPERGULA MORISONII Bureau—Pearlwort Spurrey (Figure 26). 2n = 18 (Europe). Sandy roadsides, disturbed ground. From Europe.

SPERGULA PENTANDRA Linnaeus—Wingstem Spurrey (Figure 26). 2n = 18 (Europe). Sandy fields, disturbed ground. From Eurasia, northern Africa.

Spergularia canadensis (Persoon) G. Don var. canadensis—Northern Sand-spurrey (Figure 26). 2n = 36. Salt marshes, tidal shores.

SPERGULARIA RUBRA (Linnaeus) J. Presl & C. Presl—Red Sand-spurrey (Figure 27). 2n = 18, 27, 36, 54 (all Europe). Dry, sandy, gravelly roadsides or disturbed places. From Eurasia.

Spergularia salina J. Presl & C. Presl—Salt-marsh Sand-spurrey (Figure 27). 2n = 18? (Asia), 36 (Europe). Salt marshes, saline or brackish soils. [S. marina (Linnaeus) Grisebach var. marina; S. marina var. leiosperma (Kindberg) Gürke]

Stellaria alsine Grimm—Bog Chickweed (Figure 27). 2n = 24. Brook sides, springy places, wet ditches.

Stellaria borealis Bigelow subsp. borealis—Northern Stitchwort (Figure 27). 2n = 52. Springy and other wet places. [S. calycantha (Ledebour) Bongard var. calycantha, misapplied; S. calycantha var. floribunda (Fernald) Fernald; S. calycantha var. isophylla (Fernald) Fernald]
**STELLARIA COREI** Shinners—Tennessee Chickweed (Figure 28). 2n = 60. Rocky woods. From farther west. [S. pubera Michaux var. silvatica Weatherby]

**STELLARIA GRAMINEA** Linnaeus—Common Stitchwort (Figure 28). 2n = 39, 52. Fields, roadsides. From Europe.

**STELLARIA HOLOSTEA** Linnaeus—Greater Stitchwort (Figure 28). 2n = 26 (Europe). Dry woods, roadsides. From Eurasia.

*Stellaria humifusa* Rottbøll—Salt-marsh Stitchwort (Figure 28). 2n = 26. Salt marshes.

*Stellaria longifolia* Muhlenberg ex Willdenow—Long-leaved Stitchwort (Figure 29). 2n = 26. River thickets, meadows.

**STELLARIA MEDIA** (Linnaeus) Villars—Common Chickweed (Figure 29). 2n = 40, 42, 44. Waste places, open woodland. From Europe.

**STELLARIA PUBERA** Michaux—Star Chickweed (Figure 29). 2n = 30. Rich, deciduous woods, shaded rocky slopes. From farther south and west.

—*Stellaria hybrid—*

*Stellaria borealis* Bigelow subsp. borealis × *S. longifolia* Muhlenberg ex Willdenow—(Figure 29).

**VACCARIA HISPANICA** (Miller) Rauschert—Cowherb (Figure 30). 2n = 30. Waste places, roadsides, fields. From Eurasia. [Saponaria vaccaria Linnaeus]

**CHENOPODIACEAE**

*Atriplex dioica* Rafinesque—Saline Saltbush (Figure 30). 2n = 36, 54. Sea beaches. [A. subspicata (Nuttall) Rydberg]

**ATRIPLEX GLABRIUSCULA** Edmondston var. GLABRIUSCULA—Scotland Orach (Figure 30). 2n = 18. Sea beaches, salt marshes, waste places. From north coastal Europe.

*Atriplex glabriuscula* Edmondston var. acadiensis (Taschereau) S.L. Welsh—Acadian Orach (Figure 30). 2n = 36. Salt marshes with Spartina patens. [A. acadiensis Taschereau]
ATRIPLEX HORTENSIS Linnaeus—Garden Orach (Figure 31).  

ATRIPLEX LITTOREALIS Linnaeus—Grass-leaved Orach  
(Figure 31). 2n = 18. Sea beaches, ballast dumps. From  
Europe. [A. PATULA Linnaeus subsp. LITTOREALIS  
(Linnaeus) H.M. Hall & Clements]

Atriplex mucronata Rafinesque—Seabeach Orach (Figure 31). 2n = 18. Sandy, sea beaches, salt marsh borders. [A. arenaria  
Nuttall; A. cristata Humboldt & Bonpland ex Willdenow var.  
arenaria (Nuttall) Kuntze]

Atriplex patula Linnaeus—Spearscale (Figure 31). 2n = 36. Sea  
beaches, roadsides, fields.

ATRIPLEX PROSTRATA Boucher ex de Candolle—Fat-hen  
(Figure 32). 2n = 18. Sea beaches, salt marshes. From Eurasia.  
[A. HASTATA Linnaeus, misapplied; A. PATULA Linnaeus  
var. HASTATA (Linnaeus) A. Gray, misapplied]

ATRIPLEX ROSEA Linnaeus—Tumbling Orach (Figure 32).  
2n = 18. Salty flats, waste places, roadsides. From Eurasia.

ATRIPLEX TATARICA Linnaeus—Tatarian Orach (Figure 32).  
2n = 18, 36. Waste places, ballast. From Eurasia.

AXYRIS AMARANTHOIDES Linnaeus—Russian Pigweed (Figure 32).  

BASSIA HIRSUTA (Linnaeus) Ascherson—Hairy Smotherweed  
(Figure 33). 2n = 18. Weedy salt marshes, seashores, coastal  
dunes. From Eurasia.

BASSIA HYSSOPIFOLIA (Pallas) Kuntze—Fivehorn Smother-  
weed (Figure 33). 2n = 18. Waste places. From Eurasia.

BETA VULGARIS Linnaeus subsp. VULGARIS—Common Beet  
(Figure 33). 2n = 18. Waste places. From cultivation.

CHENOPODIUM ALBUM Linnaeus—Lamb’s-quarters (Figure 33).  
2n = 54. Waste places, roadsides. From Europe. [C. ALBUM var.  
MISSOURIENSE (Aellen) Bassett & Crompton; C. LANCEO-  
LATUM Muhlenberg ex Willdenow; C. PAGANUM Reichenbach,  
misapplied]

Chenopodium berlandieri Moquin-Tandon var. boscianum (Moquin-  
Tandon) Wahl—(Figure 34). 2n = 36. Beaches, waste places,  
roadsides. [C. boscianum Moquin-Tandon]
Chenopodium berlandieri Moquin-Tandon var. bushianum (Aellen) Cronquist—Village Goosefoot (Figure 34). \(2n = 36\). Open woods, waste places, roadsides. [C. bushianum Aellen]

Chenopodium berlandieri Moquin-Tandon var. macrocalycium (Aellen) Cronquist—(Figure 34). \(2n = 36\). Sea beaches. [C. macrocalycium Aellen]

CHENOPODIUM BERLANDIERI Moquin-Tandon var. ZSCHACHEI (Murr) Murr ex Graebner—(Figure 34). \(2n = 36\). Roadsides. From farther west.

CHENOPODIUM BONUS-HENRICUS Linnaeus—Good King Henry (Figure 35). \(2n = 36\). Waste places, roadsides. From Europe.

Chenopodium capitatum (Linnaeus) Ambrosi var. capitatum—Strawberry-blite (Figure 35). \(2n = 18\). Open woods, clearings.

Chenopodium foggii Wahl—Fogg’s Goosefoot (Figure 35). \(2n = 18\). Rocky woods.

CHENOPODIUM FOLIOSUM (Moench) Ascherson—Strawberry Spinach (Figure 35). \(2n = 18\). Waste places. From Eurasia, northern Africa.

Chenopodium glaucum Linnaeus var. glaucum—Oak-leaved Goosefoot (Figure 36). \(2n = 18\). Waste places, roadsides, railroads.

CHENOPODIUM GLAUCUM Linnaeus var. SALINUM (Standley) B. Boivin—Rocky Mountain Goosefoot (Figure 36). \(2n = 18\). Waste places. From farther west. [C. SALINUM Standley]

CHENOPODIUM INCANUM (S. Watson) A. Heller var. INCANUM—Mealy Goosefoot (Figure 36). \(2n = 18\). Waste places. From farther west.

CHENOPODIUM LEPTOPHYLLUM (Moquin-Tandon) Nuttall ex S. Watson—(Figure 36). \(2n = 18\). Sandy coastal areas. From farther west.

CHENOPODIUM MURALE Linnaeus—Sowbane (Figure 37). \(2n = 18\). Waste places, roadsides. From Eurasia, north Africa.

CHENOPODIUM POLYSPERMUM Linnaeus var. POLYSPERMUM—(Figure 37). \(2n = 18\). Waste places. From Eurasia.

CHENOPODIUM POLYSPERMUM Linnaeus var. ACUTIFOLIUM (Smith) Gaudin—(Figure 37). \(2n = 18\). Waste places. From Eurasia.
CHENOPODIUM PRATERICOLA Rydberg—Desert Goosefoot (Figure 37). $2n = 18$. Waste places, railroads. From farther west.

Chenopodium rubrum Linnaeus var. rubrum—Coast Blite (Figure 38). $2n = 18$. Salt marshes.

Chenopodium rubrum Linnaeus var. humile (Hooker) S. Watson—(Figure 38). $2n = 18$. Saline or brackish soil. [C. humile Hooker]

Chenopodium simplex (Torrey) Rafinesque—Maple-leaved Goosefoot (Figure 38). $2n = 18$. Open, often rocky, rich woods, clearings, waste places. [C. gigantospermum Aellen; C. hybridum Linnaeus var. gigantospermum (Aellen) (Rouleau); C. hybridum, misapplied]

Chenopodium standleyanum Aellen—Woodland Goosefoot (Figure 38). $2n = 18$. Dry, often rocky woods. [C. hybridum Linnaeus var. standleyanum (Aellen) Fernald]

CHENOPODIUM STRICTUM Roth—Striped Goosefoot (Figure 39). $2n = 36$. Weedy places. From Eurasia. [C. STRICTUM var. GLAUCOPHYLLUM (Aellen) Wahl]

CHENOPODIUM URBICUM Linnaeus—Upright Goosefoot (Figure 39). $2n = 18$. Waste places, wool waste. From Eurasia.

CYCLOLOMA ATRIPLICIFOLIUM (Sprengel) J.M. Coulter—(Figure 39). $2n = 36$. Roadsides, waste places, usually sandy. From farther west.

DYSPHANIA AMBROSIOIDES (Linnaeus) Mosyakin & Clemants—Mexican-tea (Figure 39). $2n = 32$. Waste places. From farther south. [CHENOPODIUM AMBROSIOIDES Linnaeus var. AMBROSIOIDES]

DYSPHANIA ANTHELMINTICA (Linnaeus) Mosyakin & Clemants—Wormseed. $2n = ?$. Waste places, roadsides. From farther south. [CHENOPODIUM AMBROSIOIDES Linnaeus var. ANTHELMINTICUM (Linnaeus) A. Gray; this taxon is not mapped because it is not typically separated from C. AMBROSIOIDES in New England herbaria]

DYSPHANIA BOTRYS (Linnaeus) Mosyakin & Clemants—Jerusalem-oak (Figure 40). $2n = 18$. Waste places, roadsides, shores. From Eurasia. [CHENOPODIUM BOTRYS Linnaeus]

DYSPHANIA GRAVEOLENS (Willdenow) Mosyakin & Clemants—Fetid Goosefoot (Figure 40). $2n = ?$. Waste places. From farther west. [CHENOPODIUM GRAVEOLENS Willdenow]
DYSPHANIA MULTIFIDA (Linnaeus) Mosyakin & Clemants—Scented Goosefoot (Figure 40). 2n = 32. Waste places. From South America. [CHENOPODIUM MULTIFIDUM Linnaeus; ROUBIEVA MULTIFIDA (Linnaeus) Moquin-Tandon]

DYSPHANIA PUMILIO (R. Brown) Mosyakin & Clemants—Small Crumbweed (Figure 40). 2n = 18. Waste places, sidewalks. From Australia. [CHENOPODIUM CARINTA-TUM R. Brown, misapplied; C. PUMILIO R. Brown]

KOCHIA SCOPARIA (Linnaeus) Schrader subsp. SCOPARIA—Summer-cypress (Figure 41). 2n = 18. Roadside, waste places. From Eurasia. [K. SCOPARIA var. CULTA (Voss) Farwell; BASSIA SCOPARIA (Linnaeus) A.J. Scott]

KOCHIA SCOPARIA (Linnaeus) Schrader subsp. DENSIFLORA (Turczaninow ex Moquin-Tandon) Aellen—(Figure 41). 2n = 18. Freight yards, wool waste. From Asia. [K. SCOPARIA var. PUBESCENS Fenzl; K. SCOPARIA var. SUBVILLOSA Moquin-Tandon; K. SIEVERSIANA C.A. Meyer, misapplied in part]

MONOLEPIS NUTTALLIANA (Schultes) Greene—Povertyweed (Figure 41). 2n = 18. Waste places. From farther west. [M. CHENOPODIOIDES Moquin-Tandon]

Salicornia bigelowii Torrey—Dwarf Saltwort (Figure 41). 2n = 36. Salt marshes.

Salicornia depressa Standley—Samphire (Figure 42). 2n = 36. Salt marshes. [S. europaea Linnaeus var. europaea, misapplied; S. europaea Linnaeus var. simplex (Pursh) Fernald]

Salicornia maritima S.L. Wolff & Jefferies—Slender Glasswort (Figure 42). 2n = 18. Salt marshes, sea shores. [S. prostrata Pallas, misapplied; S. europaea Linnaeus var. prostrata (Pallas) Fernald, misapplied]

SALSOLA COLLINA Pallas—Slender Russian Thistle (Figure 42). 2n = 18. Waste places, roadsides, fields. From Eurasia.

SALSOLA KALI Linnaeus subsp. KALI—Common Saltwort (Figure 42). 2n = 36. Sea beaches. From Europe.

SALSOLA KALI Linnaeus subsp. PONTICA (Pallas) Mosyakin—Prickly Russian Thistle (Figure 43). 2n = 36. Sea beaches. From Eurasia, north Africa. [S. KALI var. CAROLINIANA (Walter) Nuttall; S. CAROLINIANA Walter]
SALSOLA TRAGUS Linnaeus—Russian Thistle (Figure 43). 2n = 36. Sandy shores, roadsides, waste places, fields. From Eurasia. [S. IBERICA (Sennen & Paul) Botschantzev ex Czerépanov; S. KALI Linnaeus var. TENUIFOLIA Tausch ex Moquin-Tandon; S. PESTIFER A. Nelson]

Sarcocornia pacifica (Standley) A.J. Scott—Woody Glasswort (Figure 43). 2n = ? Sea beaches, tidal flats, salt marshes. [Salicornia virginica Linnaeus, misapplied]

SPINACIA OLERACEA Linnaeus—Spinach (Figure 43). 2n = 12. Waste places. From Eurasia, northern Africa.

Suaeda calceoliformis (Hooker) Moquin-Tandon—Horned Sea-blite (Figure 44). 2n = 36. Salt marshes, sea beaches. [S. americana (Persoon) Fernald]

Suaeda linearis (Elliott) Moquin-Tandon—Southern Sea-blite (Figure 44). 2n = 54. Salt marshes, sea beaches.

Suaeda maritima (Linnaeus) Dumortier—White Sea-blite (Figure 44). 2n = 36. Salt marshes, sea beaches. [S. richii Fernald]

MOLLUGINACEAE

Mollugo verticillata Linnaeus—Carpetweed (Figure 44). 2n = 64. Waste places, roadsides, fields, sandy riverbanks.

NYCTAGINACEAE

MIRABILIS ALBIDA (Walter) Heimerl—(Figure 45). 2n = 58. Dry, sandy waste places, roadsides. From farther west. [M. HIRSUTA (Pursh) MacMillan]

MIRABILIS JALAPA Linnaeus var. JALAPA—Marvel-of-Peru (Figure 45). 2n = 58. Waste places, roadsides. From Mexico.

MIRABILIS LINEARIS (Pursh) Heimerl var. LINEARIS—(Figure 45). 2n = 40. Dry, open soil, disturbed areas. From farther west.

MIRABILIS NYCTAGINEA (Michaux) MacMillan—Wild Four-o’-clock (Figure 45). 2n = 58. Waste places, railroads, cracks in urban pavements. From farther west.

PHYTOLACCACEAE

Phytolacca americana Linnaeus var. americana—Pokeweed (Figure 46). 2n = 36. Clearings, waste places, roadsides, in moist soil.
PLUMBAGINACEAE

*Limonium carolinianum* (Walter) Britton—Sea-lavender (Figure 46). 2n = 36. Salt marshes. [*L. nashii* Small]

POLYGONACEAE

*BISTORTA OFFICINALIS* Delarbre—European Bistort (Figure 46). 2n = 48. Fields, meadows, thickets. From Eurasia. [*POLYGONUM BISTORTA* Linnaeus]

*Bistorta vivipara* (Linnaeus) Delarbre—Alpine Bistort (Figure 46). 2n = 96, 120. Alpine areas. [*Polygonum viviparum* Linnaeus]

*CHORIZANTHE PUNGENS* Bentham var. *PUNGENS*—Monterey Spineflower (Figure 47). 2n = 40. Wool waste. From California.

*EMEX SPINOSA* (Linnaeus) Campderà—Devil's-thorn (Figure 47). 2n = 20. Disturbed areas. From Mediterranean region.

*FAGOPYRUM ESCULENTUM* Moench—Common Buckwheat (Figure 47). 2n = 16 (China). Fields, roadsides, waste places. From China. [*F. SAGITTATUM* Gilibert]

*FAGOPYRUM TATARICUM* (Linnaeus) Gaertner—India-wheat (Figure 47). 2n = 16 (China). Fields, roadsides, waste places. From China.

*FALLOPIA BALDSCHUANICA* (Regel) Holub—Chinese Fleecevine (Figure 48). 2n = 20 (Korea). Waste places. From central Asia. [*POLYGONUM AUBERTII* L. Henry]

*Fallopia cilinodis* (Michaux) Holub—Fringed Bindweed (Figure 48). 2n = 22. Dry, open woods, clearings, thickets. [*Polygonum cilinode* Michaux]

*FALLOPIA CONVOLVULUS* (Linnaeus) Á. Löve—Black Bindweed (Figure 48). 2n = 40. Waste places. From Eurasia. [*POLYGONUM CONVOLVULUS* Linnaeus var. *CONVOLVULUS*; *P. CONVOLVULUS* var. *SUBALATUM* Lejeune & Courtois]

*FALLOPIA DUMETORUM* (Linnaeus) Holub—Copse Bindweed (Figure 48). 2n = 20. Fields, waste places, woodland borders. From Eurasia. [*POLYGONUM SCANDENS* Linnaeus var. *DUMETORUM* (Linnaeus) Gleason]

*FALLOPIA JAPONICA* (Houttuyn) Ronse Decraene var. *JAPONICA*—Japanese Knotweed (Figure 49). 2n = 44, 66, 88
(Korea). Roadsides, waste places, forest margins. From eastern Asia. \[POLYGONUM CUSPIDATUM\] Siebold & Zuccarini

**FALLOPIA SACHALINENSIS** (F. Schmidt) Ronse Decraene—Giant Knotweed (Figure 49). $2n = 44, 66, 102, 132$ (Japan, Korea). Roadsides, waste places. From eastern Asia. \[POLYGONUM SACHALINENSE\] F. Schmidt

*Fallopia scandens* (Linnaeus) Holub—Climbing False Buckwheat (Figure 49). $2n = 20$. Damp thickets, often along streams, low woods. \[Polygonum cristatum\] Engelmann & A. Gray; \[P. scandens\] Linnaeus var. *scandens*; \[P. scandens var. cristatum\] (Engelmann & A. Gray) Gleason

—*Fallopia* hybrid—

**FALLOPIA × BOHEMICA** (Chrtek & Chrtková) J.P. Bailey—(Figure 49). $2n = 44, 66, 88$ (Korea). \[F. JAPONICA\] (Houttuyn) Ronse Decraene var. *JAPONICA × F. SACHALINENSIS* (F. Schmidt) Ronse Decraene

*Oxyria digyna* (Linnaeus) Hill—Alpine Mountain-sorrel (Figure 50). $2n = 14$. Alpine areas.

*Persicaria amphibia* (Linnaeus) Gray—Water Smartweed (Figure 50). $2n = 66, 132$. Shores, shallow waters of streams and ponds. \[Polygonum amphibium\] Linnaeus var. *amphibium*; \[P. amphibium var. emersum\] Michaux; \[P. amphibium var. stipulaceum\] N. Coleman; \[P. coccineum\] Muhlenberg ex Willdenow

*Persicaria arifolia* (Linnaeus) Haraldson—Halberd-leaved Tearthumb (Figure 50). $2n = ?$. Swamps, meadows, wet places. \[Polygonum arifolium\] Linnaeus var. *pubescens* (R. Keller) Fernald

*Persicaria careyi* (Olney) Greene—(Figure 50). $2n = ?$. Roadsides, clearings, low thickets, swamps. \[Polygonum careyi\] Olney

**PERSICARIA HYDROPIPER** (Linnaeus) Spach—Common Smartweed (Figure 51). $2n = 20$. Moist or wet soils, especially in weedy places. From Europe. \[POLYGONUM HYDROPIPER\] Linnaeus

*Persicaria hydropiperoides* (Michaux) Small—Swamp Smartweed (Figure 51). $2n = ?$. Shallow water, shores, marshes, swamps, swales. \[Polygonum hydropiperoides\] Michaux; \[P. opelousanum\] Riddell ex Small var. *opelousanum*; \[P. opelousanum var. adenocalyx\] Stanford
Persicaria lapathifolia (Linnaeus) Gray—Pale Smartweed (Figure 51).  2n = 22. Swampy thickets, shores, damp clearings, ditches, fields, roadsides, waste places. [Polygonum lapathifolium Linnaeus var. lapathifolium; P. lapathifolium var. prostratum Wimmer; P. lapathifolium var. salicifolium Sibthorp; P. scabrum Moench]

PERSICARIA LONGISETA (Bruijn) Kitagawa—Creeping Smartweed (Figure 51).  2n = 40. Moist roadsides, waste places, shores. From eastern Asia. [Polygonum caespitosum Blume var. LONGISETUM (Bruijn) Steward]

PERSICARIA MACULOSA Gray—Lady’s-thumb (Figure 52).  2n = 44. Roadsides, waste places, damp clearings, shores. From Eurasia. [Polygonum dubium Stein ex A. Braun; P. persicaria Linnaeus var. persicaria; P. persicaria var. ruderalis (Salisbury) Meisner; P. puritanum Fernald]

PERSICARIA MINOR (Hudson) Opiz—Small Water-pepper (Figure 52).  2n = 40. Roadsides, ditches, damp, open places. From Europe. [Polygonum minus Hudson; P. minus var. subcontinental (Meisner) Fernald]

PERSICARIA NEPALENSIS (Meisner) H. Gross—(Figure 52).  2n = 48. Waste places. From Asia. [Polygonum nepalense Meisner]

PERSICARIA ORIENTALIS (Linnaeus) Spach—Kiss-me-over-the-garden-gate (Figure 52).  2n = 22. Moist, waste places, roadsides, fields. From Asia. [Polygonum orientale Linnaeus]

Persicaria pensylvanica (Linnaeus) M. Gómez—Pinkweed (Figure 53).  2n = 88. Shores, thickets, clearings, ditches, waste places, in moist soil. [Polygonum pensylvanicum Linnaeus var. pensylvanicum; P. pensylvanicum var. laevigatum Fernald; P. pensylvanicum var. nesophilum Fernald]

PERSICARIA PERFOLIATA (Linnaeus) H. Gross—Devil’s-tail Tearthumb (Figure 53).  2n = ? Roadsides, waste places. From Asia. [Polygonum perfoliatum (Linnaeus) Linnaeus]

Persicaria punctata (Elliott) Small—Dotted Smartweed (Figure 53).  2n = 44. Wet, often sandy, soil, shores, marshes. [Polygonum punctatum Elliott var. punctatum; P. punctatum var. confertiflorum
Persicaria robustior (Small) E.P. Bicknell—(Figure 53). 2n = ? Shores, swamps, often in water. \[Polygonum robustius\] (Small) Fernald

Persicaria sagittata (Linnaeus) H. Gross—Arrow-vine (Figure 54). 2n = 40. Swamps, meadows, moist, low ground. \[Polygonum sagittatum\] Linnaeus

Persicaria setacea (Baldwin) Small—Swamp Smartweed (Figure 54). 2n = 20. Shores, alluvial woods, swamps. \[Polygonum setaceum\] Baldwin var. \textit{interjectum}\ Fernald

Persicaria virginiana (Linnaeus) Gaertner—Jumpseed (Figure 54). 2n = 44. Shaded, rich soil. \[Polygonum virginianum\] Linnaeus; \[Tovara virginiana\] (Linnaeus) Rafinesque

\textit{PERSICARIA WALCHII} Greuter & Burdet var. \textit{WALLICHII}—Himalayan Knotweed (Figure 54). 2n = 22. Moist, waste places. From Asia. \[POLYGONUM POLYSTACHYUM\] Wallich \textit{ex} Meisner

—Persicaria hybrid—

\textit{Persicaria hydropiperoides} (Michaux) Small \times \textit{P. robustior} (Small) E.P. Bicknell—(Figure 55).

\textit{Polygonella articulata} (Linnaeus) Meisner—Northern Jointweed (Figure 55). 2n = 32. Dry, sandy wastes, roadsides.

\textit{Polygonum achoreum} S.F. Blake—Blue Knotweed (Figure 55). 2n = 40, 60. Roadsides, waste places.

\textit{POLYGONUM ARENARIUM} Waldstein & Kitaibel subsp. \textit{ARENARIUM}—Lesser Red Knotgrass (Figure 55). 2n = 20. Waste places. From Eurasia.

\textit{POLYGONUM ARGYROCOLEON} Steudel \textit{ex} Kunze—Persian Knotweed (Figure 56). 2n = 40. Fields, waste places, often in saline soil. From Asia.

\textit{POLYGONUM AVICULARE} Linnaeus subsp. \textit{AVICULARE}—Common Knotweed (Figure 56). 2n = 40, 60. Waste places, roadsides. From Eurasia. \[P. AVICULARE\] var. \textit{VEGETUM} Ledebour

\textit{Polygonum aviculare} Linnaeus subsp. \textit{buxiforme} (Small) Costea & Tardif—American Knotweed (Figure 56). 2n = 60. Seashores,
Polygonum aviculare var. littorale Chapman, misapplied; P. buxiforme Small

Polygonum aviculare Linnaeus subsp. depressum (Meisner) Arcangeli—Doorweed (Figure 56). 2n = 40, 60. Roadsides, waste places, fields. From Europe. [P. aviculare var. arenastrum (Boreau) Rouy; P. arenastrum Boreau]

Polygonum aviculare Linnaeus subsp. neglectum (Besser) Arcangeli—(Figure 57). 2n = 40, 60. Waste places. From Europe. [P. neglectum Besser]

Polygonum aviculare Linnaeus subsp. rurivagum (Jordan ex Boreau) Berher—Cornfield Knotgrass (Figure 57). 2n = 60. Roadsides, waste places. From Europe. [P. aviculare var. angustissimum Meisner; P. rurivagum Jordan ex Boreau]

Polygonum bellardii Allioni—(Figure 57). 2n = ? Waste places. From Europe.

Polygonum douglasii Greene—(Figure 57). 2n = 40. Dry soil on ledges.

Polygonum erectum Linnaeus—(Figure 58). 2n = ? Dry, waste places.

Polygonum fowleri B.L. Robinson subsp. fowleri—(Figure 58). 2n = 40, 60. Seashores. [P. allocarpum S.F. Blake]

Polygonum glaucum Nuttall—Seabeach Knotweed (Figure 58). 2n = 40. Sea beaches, salty, pond shores, dune hollows.

Polygonum ramosissimum Michaux subsp. ramosissimum—Bushy Knotweed (Figure 58). 2n = 60. Salt marshes, sea beaches, waste places, roadsides. [P. exsertum Small]

Polygonum ramosissimum Michaux subsp. prolificum (Small) Costea & Tardif—(Figure 59). 2n = 60. Salt marshes, saline shores. [P. prolificum (Small) B.L. Robinson]

Polygonum tenue Michaux—Pleat-leaved Knotweed (Figure 59). 2n = 20. Dry, acid, open soil.

Rheum rhubarbarum Linnaeus—Garden Rhubarb (Figure 59). 2n = 44. Roadsides, old house sites. From Eurasia. [Rheum rhaponticum Linnaeus, misapplied]

Rumex acetosa Linnaeus—Garden Sorrel (Figure 59). 2n = 14 (pistillate), 15 (staminate). Fields, roadsides, waste places, fallow ground. From Eurasia, northwestern Africa.
RUMEX ACETOSELLA Linnaeus—Sheep Sorrel (Figure 60). 2n = 14, 28, 42. Roadsides, fields, waste places, meadows, and cemeteries. From Eurasia. [R. ACETOSELLA var. PYRENAICUS (Pourret ex Lapeyrouse) Timbal-Lagrave]

RUMEX ALPINUS Linnaeus—Monk’s-rhubarb (Figure 60). 2n = 20. Roadsides, waste places, fields, meadows. From Eurasia.

RUMEX ALTISSIMUS Alphonso Wood—Pale Dock (Figure 60). 2n = 20. Waste places. From farther west.

Rumex brittanica Linnaeus—Water Dock (Figure 60). 2n = 20. Swamps, ditches, wet meadows, shores. [R. orbiculatus A. Gray]

RUMEX CRISPUS Linnaeus—Yellow Dock (Figure 61). 2n = 60. Waste places, fields. From Eurasia.

Rumex fueginus Philippi—American Golden Dock (Figure 61). 2n = 40. Salt marshes, shores, waste places. [R. maritimus Linnaeus var. fueginus (Philippi) Dusén]

Rumex hastatulus Baldwin—Wild Sorrel (Figure 61). 2n = 8 (pistillate), 9 (staminate), 10 (both sexes). Sandy soil, beaches, waste places.

RUMEX LONGIFOLIUS de Candolle—Northern Dock (Figure 61). 2n = 60. Fields, meadows, roadsides, waste places. From Eurasia. [R. DOMESTICUS Hartman]

RUMEX MARITIMUS Linnaeus—Golden Dock (Figure 62). 2n = 40. Ballast, waste places. From Europe.

RUMEX OBTUSIFOLIUS Linnaeus—Bitter Dock (Figure 62). 2n = 40. Waste places, roadsides, fields, meadows. From Eurasia.

Rumex occidentalis S. Watson—(Figure 62). 2n = 120. Swamps, shores, swales. [R. aquaticus Linnaeus subsp. fenestratus (Greene) Hultén; R. fenestratus Greene]

Rumex pallidus Bigelow—Seabeach Dock (Figure 62). 2n = 20. Salt marshes, sea beaches, coastal dunes.

RUMEX PATIENTIA Linnaeus—Patience Dock (Figure 63). 2n = 60. Waste places, roadsides, fields. From Eurasia.

Rumex persicarioides Linnaeus—(Figure 63). 2n = 40. Coastal marshes and shores. [R. maritimus Linnaeus var. persicarioides (Linnaeus) R.S. Mitchell]

RUMEX PULCHER Linnaeus—Fiddle Dock (Figure 63). 2n = 20. Waste places, roadsides. From Eurasia, northern Africa.
**RUMEX TRIANGULIVALVIS** (Danser) Rechinger f.—White Willow Dock (Figure 63). $2n = 20$. Railroads, waste places, roadides, fields. From farther north and west. [*R. mexicanus* Meisner, misapplied; *R. salicifolius* Weinman, misapplied]

*Rumex verticillatus* Linnaeus—Swamp Dock (Figure 64). $2n = 60$. Swamps, meadows, marshes.

**RUMEX VIOLASCENS** Rechinger f.—Violet Dock (Figure 64). $2n = 20$. Waste places. From farther west.

—*Rumex* hybrids—

**RUMEX CRISPUS** Linnaeus × *R. LONGIFOLIUS* de Candolle—(Figure 64).

**RUMEX CRISPUS** Linnaeus × *R. OBTUSIFOLIUS* Linnaeus—(Figure 64).

**RUMEX × DISSIMILIS** Rechinger f.—(Figure 65). [*R. LONGIFOLIUS* de Candolle × *R. OBTUSIFOLIUS* Linnaeus]

**PORTULACACEAE**

**CALANDRINIA CILIATA** (Ruiz & Pavón) de Candolle—Red Maids (Figure 65). $2n = 24$. Fields. From farther west.

*Claytonia caroliniana* Michaux—Broad-leaved Spring-beauty (Figure 65). $2n = 16, 24, 25, 26, 27, 36, 38$. Rich woods.

**CLAYTONIA PERFOLIATA** Donn ex Willdenow subsp. *PERFOLIATA*—Miner’s-lettuce (Figure 65). $2n = 24, 36, 48, 60$. Roadides. From western North America. [*MONTIA PERFOLIATA* (Donn ex Willdenow) Howell]

*Claytonia virginica* Linnaeus—Eastern Spring-beauty (Figure 66). $2n = 12–190$. Rich, damp woods.

*Montia fontana* Linnaeus—Water Blinks (Figure 66). $2n = 20, 40$. Moist woods, springy slopes. [*M. lamprosperma* Chamisso]

**MONTIA LINEARIS** (Douglas ex Hooker) Greene—(Figure 66). $2n = 28$. Fields. From western North America.

**PORTULACA GRANDIFLORA** Hooker—Moss-rose (Figure 66). $2n = 18$. Dumps, waste places. From South America.

**PORTULACA OLERACEA** Linnaeus—Common Purslane (Figure 67). $2n = 18, 36, 54$. Waste places, fields. From Europe.
Figure 2. Distribution maps.

TETRAGONIA TETRAGONOIDES

ALTERNANTHERA PUNGENS

AMARANTHUS ALBUS

AMARANTHUS BLITOIDES
AMARANTHUS BLITUM

Amaranthus cannabinus

AMARANTHUS CAUDATUS

AMARANTHUS CRUENTUS

Figure 3. Distribution maps.
Figure 4. Distribution maps.

AMARANTHUS DEFLEXUS

Amaranthus hybridus

AMARANTHUS HYPOCHONDRIACUS

AMARANTHUS PALMERI
Figure 5. Distribution maps.
Figure 6. Distribution maps.
Figure 7. Distribution maps.

CELOSIA CRISTATA

FROELICHA GRACILIS

GOMPHRENA GLOBOSA

Opuntia humifusa
var. humifusa
Figure 8. Distribution maps.
Figure 9. Distribution maps.

CERASTIUM FONTANUM subsp. VULGARE

CERASTIUM GLOMERATUM

Cerastium nutans var. nutans

CERASTIUM PUMILUM
Figure 10. Distribution maps.

*CERASTIUM SEMIDECANDRUM*  

*CERASTIUM TOMENTOSUM*  

*DIANTHUS ARMERIA*  
subsp. *ARMERIA*  

*DIANTHUS BARBATUS*  
subsp. *BARBATUS*
Figure 11. Distribution maps.
Figure 12. Distribution maps.
Figure 13. Distribution maps.

GYPSOPHILA SCORZONERIFOLIA

HERNIARIA GLABRA

HERNIARIA HIRSUTA
var. HIRSUTA

HOLOSTEUM UMBELLATUM
var. UMBELLATUM
Figure 14. Distribution maps.

*Honckenya peploides*

subsp. *robusta*

*Minuartia caroliniana*

*Minuartia glabra*

*Minuartia groenlandica*
Figure 15. Distribution maps.
Figure 16. Distribution maps.

Moehringia macrophylla

MYOSOTON AQUATICUM

Paronychia argyrocoma

Paronychia canadensis
Figure 17. Distribution maps.

- *Paronychia fastigiata*
  - var. *fastigiata*

- *Petrophagia Prolifera*

- *Petrophagia Saxifraga*
  - var. *Saxifraga*

- *Polycarpum Tetraphyllum*
  - subsp. *Tetraphyllum*
Figure 18. Distribution maps.

Sagina decumbens
subsp. decumbens

Sagina japonica

Sagina maxima
subsp. maxima

Sagina nodosa
subsp. nodosa
Figure 19. Distribution maps.

*Sagina nodosa* subsp. *borealis*

*SAGINA PROCUMBENS*

*SAPONARIA OCYMOIDES*

*SAPONARIA OFFICINALIS*
Figure 20. Distribution maps.
Figure 21. Distribution maps.

Silene antirrhina

SILENE ARMERIA

Silene caroliniana
subsp. pensylvanica

SILENE CHALCEDONICA

Figure 21. Distribution maps.
Figure 22. Distribution maps.
Figure 23. Distribution maps.

*SILENE DIOICA*

*SILENE FLOS-CUCULI*
subsp. *FLOS-CUCULI*

*SILENE GALLICA*

*SILENE LATIFOLIA*
Figure 24. Distribution maps.
Figure 25. Distribution maps.
Figure 26. Distribution maps.
Figure 27. Distribution maps.

SPERGULARIA RUBRA

Spergularia salina

Stellaria alsine

Stellaria borealis subsp. borealis
Figure 28. Distribution maps.

STELLAGR COREI

STELLAGR GRAMINEA

STELLAGR HOLOSTEA

Stellaria humifusa

Figure 28. Distribution maps.
Figure 29. Distribution maps.

Stellaria longifolia

STEMARIA MEDIA

STEMARIA PUBERA

Stellaria borealis subsp. borealis
X S. longifolia
Figure 30. Distribution maps.

VACCARIA HISPANICA

ATRIPLEX GLABRIUSCULA
var. GLABRIUSCULA

ATRIPLEX glabriuscula
var. acadiensis

Atriplex dioica
Figure 31. Distribution maps.

ATRIPLEX HORTENSIS

ATRIPLEX LITTORALIS

Atriplex mucronata

Atriplex patula
Figure 32. Distribution maps.
Figure 33. Distribution maps.
Figure 34. Distribution maps.

Chenopodium berlandieri
var. boscianum

Chenopodium berlandieri
var. bushianum

Chenopodium berlandieri
var. macrocalycinum

CHENOPODIUM BERLANDIERI
var. ZSCHACKEI
Figure 35. Distribution maps.
Figure 36. Distribution maps.

Chenopodium glaucum
var. glaucum

CHENOPODIUM GLAUCUM
var. SALINUM

CHENOPODIUM INCANUM
var. INCANUM

CHENOPODIUM LEPTOPHYLLUM

Figure 37. Distribution maps.
Figure 38. Distribution maps.

Chenopodium rubrum
var. rubrum

Chenopodium rubrum
var. humile

Chenopodium simplex

Chenopodium standleyanum
Figure 39. Distribution maps.
Figure 40. Distribution maps.

*DYSPHANIA BOTRYS*       *DYSPHANIA GRAVEOLENS*

*DYSPHANIA MULTIFIDA*      *DYSPHANIA PUMILIO*

Figure 40. Distribution maps.
Figure 41. Distribution maps.

**Kochia scoparia**
- subsp. SCOPARIA

**Kochia scoparia**
- subsp. DENSIFLORA

**Monoëpis nuttalliana**

**Salicornia bigelovii**

Figure 41. Distribution maps.
Figure 42. Distribution maps.

Salicornia depressa

Salicornia maritima

SALSOLA COLLINA

SALSOLA KALI
subsp. KALI
Figure 43. Distribution maps.

*SALSOLA KALI*
subsp. *PONTICA*

*SALSOLA TRAGUS*

*Sarcocornia pacifica*

*SPINACIA OLERacea*
Figure 44. Distribution maps.

*Suada calceoliformis*  
*Suada linearis*  
*Suada maritima*  
*Mollugo verticillata*
Figure 45. Distribution maps.

- **MIRABILIS ALBIDA**
- **MIRABILIS JALAPA**
  var. **JALAPA**
- **MIRABILIS LINEARIS**
  var. **LINEARIS**
- **MIRABILIS NYCTAGINEA**
Figure 46. Distribution maps.

Phytolacca americana
var. americana

Limonium carolinianum

BISTORTA OFFICINALIS

Bistorta vivipara
Figure 47. Distribution maps.

CHORIZANTHE PUNGENS var. PUNGENS

EMEX SPINOSA

FAGOPYRUM ESCULENTUM

FAGOPYRUM TATARICUM
Figure 48. Distribution maps.
Figure 49. Distribution maps.

FALLOPIA JAPONICA
var. JAPONICA

FALLOPIA SACHALINENSIS

Fallopia scandens

FALLOPIA X BOHEMICA
Figure 50. Distribution maps.

*Oxyria digyna*  
*Persicaria amphibia*

*Persicaria arifolia*  
*Persicaria careyi*
Figure 51. Distribution maps.
Figure 52. Distribution maps.
Figure 53. Distribution maps.

Persicaria pensylvanica

PERSICARIA PERFOLIATA

Persicaria punctata

Persicaria robustior
Persicaria sagittata

Persicaria setacea

Persicaria virginiana

PERSICARIA WALlichii

var. WALlichii

Figure 54. Distribution maps.
Figure 55. Distribution maps.

*Persicaria hydropiperoides*

*X. P. robustior*

*Polygonella articulata*

*Polygonum achoreum*

*POLYGONUM ARENARIUM*

subsp. *ARENARIUM*
Figure 56. Distribution maps.
Figure 57. Distribution maps.

POLYGONUM AVICULARE
subsp. NEGLECTUM

POLYGONUM AVICULARE
subsp. RURIVAGUM

POLYGONUM BELLAIRDII

Polygonum douglasii
Figure 58. Distribution maps.

Polygonum erectum

Polygonum fowleri
  subsp. fowleri

Polygonum glaucum

Polygonum ramosissimum
  subsp. ramosissimum
Figure 59. Distribution maps.

*Polygonum ramosissimum*
subsp. *prolificum*

*Polygonum tenue*

*RHEUM RHEABARBARUM*

*RUMEX ACETOSA*

Figure 59. Distribution maps.
Figure 60. Distribution maps.

RUMEX ACETOSELLA  

RUMEX ALPINUS

RUMEX ALTISIMUS  

Rumex britanica
Figure 61. Distribution maps.

**RUMEX CRISPUS**

**Rumex fueginus**

**Rumex hastatulus**

**RUMEX LONGIFOLIUS**
Figure 62. Distribution maps.

RUMEX MARITIMUS

RUMEX OBTUSIFOLIUS

Rumex occidentalis

Rumex pallidus
Figure 63. Distribution maps.

*Rumex patientia*

*Rumex persicarioides*

*Rumex pulcher*

*Rumex triangulivalvis*
Figure 64. Distribution maps.

*Rumex verticillatus*

*RUMEX VIOLASCENS*

*RUMEX CRISPUS X. R. LONGIFOLIUS*

*RUMEX CRISPUS X. R. OBTUSIFOLIUS*
Figure 65. Distribution maps.
Figure 66. Distribution maps.

Claytonia virginica

Montia fontana

MONTIA LINEARIS

PORTULACA GRANDIFLORA

Figure 66. Distribution maps.
ACKNOWLEDGMENTS. We thank the curators and directors of the herbaria of the New England Botanical Club, Harvard University, the University of Massachusetts, the University of Vermont, and the University of Connecticut for allowing access to their collections. For the University of Maine herbarium we used their exceptional online database of Maine specimens. We are grateful also to Karen Searcy for allowing access to the herbarium and to the notebooks of Harry E. Ahles at the University of Massachusetts (Amherst), for bringing to our attention some new voucher specimens there and for checking information. James Hinds also generously checked information on voucher specimens at the University of Maine (Orono). The following persons also kindly checked certain records for us at their respective institutions: Janet Sullivan, Robert Capers, Christopher Campbell, Elizabeth Allen, Gisèle Mitrow, and Jennifer Doubt. Arthur Haines provided useful corrections to a draft of this paper.
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