

Herbs: Basal, Toothed Leaves

29

Coltsfoot (*Tussilago farfara*) Aster family (*Asteraceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Perennial herb grows 3" - 18" H. Yellow dandelion-like flower blooming in April or early May prior to the emergence of the leaves. Large delta shaped basal leaves on long petioles. Leaves smooth above and densely white hairy beneath.



Herbs: Basal, Toothed Leaves

29

Coltsfoot (*Tussilago farfara*) Aster family (*Asteraceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Perennial herb grows 3" - 18" H. Yellow dandelion-like flower blooming in April or early May prior to the emergence of the leaves. Large delta shaped basal leaves on long petioles. Leaves smooth above and densely white hairy beneath.



Description

Coltsfoot

Habit: perennial herb grows 3 - 18" tall

Leaves: basal, hairless above, densely white hairy beneath, long petioled, deltoid; 3 to 7" wide; many of the leaves develop teeth and shallow lobes later in the season

Flowers: yellow, approximately 1" wide, resembles dandelion; bloom in early spring (one of the earliest blooming species) on scaly stalk before the leaves emerge

Habitat Coltsfoot grows in damp soils of streambanks, banks and waste places.

Similar Species

Coltsfoot flowers resemble many dandelion (*Taraxacum*) species but bloom much earlier. The deltoid shape of the leaves is quite distinctive, and easily separates this species from other species with large basal leaves (*ie. Aster spp.*).

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Coltsfoot

Habit: perennial herb grows 3 - 18" tall

Leaves: basal, hairless above, densely white hairy beneath, long petioled, deltoid; 3 to 7" wide; many of the leaves develop teeth and shallow lobes later in the season

Flowers: yellow, approximately 1" wide, resembles dandelion; bloom in early spring (one of the earliest blooming species) on scaly stalk before the leaves emerge

Habitat Coltsfoot grows in damp soils of streambanks, banks and waste places.

Similar Species

Coltsfoot flowers resemble many dandelion (*Taraxacum*) species but bloom much earlier. The deltoid shape of the leaves is quite distinctive, and easily separates this species from other species with large basal leaves (*ie. Aster spp.*).

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

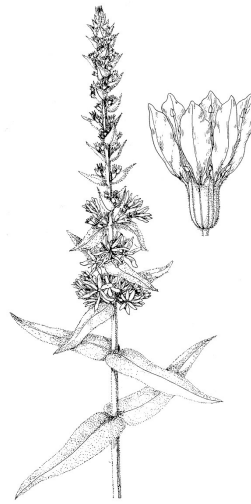
Herbs: Opposite, Untoothed Leaves

31

Purple Loosestrife (*Lythrum salicaria*) Loosestrife family (*Lythraceae*)



Photo Credit: John Lynch



For Complete description,
see side 2

KEY IDENTIFIERS:

Erect perennial with tall spikes of magenta flowers July - September. 4-6 sided stem. Persistent stalk and flower spike overwinters. Prevalent in roadside ditches, along streams and rivers, and in wetlands.



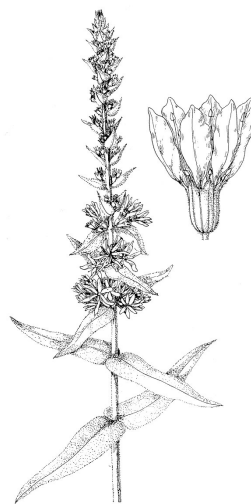
Herbs: Opposite, Untoothed Leaves

31

Purple Loosestrife (*Lythrum salicaria*) Loosestrife family (*Lythraceae*)



Photo Credit: John Lynch



For Complete description,
see side 2

KEY IDENTIFIERS:

Erect perennial with tall spikes of magenta flowers July - September. 4-6 sided stem. Persistent stalk and flower spike overwinters. Prevalent in roadside ditches, along streams and rivers, and in wetlands.



Description

Purple Loosestrife

Habit: erect, hardy perennial, 20" - 60" in height, easily identified by showy magenta flowers from July to September

Leaves: entire, opposite, 1.2" - 4" long, and lance-shaped, clasping the stem somewhat, rarely occurring in whorls of three

Stems: stiff, four to six-sided, and angular—stems and dried flower husks often persist into the following spring

Flowers: 1/2 - 3/4 inches wide with 5 or 6 petals, grow in a dense clustered spike, bright magenta, July - September

Fruit: dry capsules, aging from green to brown—each plant produces approximately 2,000,000 seeds

Habitat Purple loosestrife grows in a wide variety of naturally and humanly disturbed sites in shallow fresh water. It is especially prevalent in roadside ditches, along the shores of streams, rivers, and lakes, and in wetlands. It is tolerant of a wide variety of moisture and nutrient conditions. Prefers slightly acid or neutral soils.

Similar Species

Tall fireweed (*Epilobium angustifolium*) can be mistaken for purple loosestrife because it roughly the same size and also has a terminal spike of magenta flowers. However, its leaves are minutely toothed and its flowers have four, not 5-6 petals. Its leaves are alternate, not opposite or whorled. When not in bloom swamp milkweed (*Asclepias incarnata*) is sometimes confused with purple loosestrife. Both species occupy similar habitats and have opposite leaves, but the stem of swamp milkweed is distinctly round unlike the four to six sided stem of loosestrife. Purple loosestrife's entire, opposite or whorled leaves also distinguish it in its pre-flowering form from goldenrods that have alternate toothed leaves.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Purple Loosestrife

Habit: erect, hardy perennial, 20" - 60" in height, easily identified by showy magenta flowers from July to September

Leaves: entire, opposite, 1.2" - 4" long, and lance-shaped, clasping the stem somewhat, rarely occurring in whorls of three

Stems: stiff, four to six-sided, and angular—stems and dried flower husks often persist into the following spring

Flowers: 1/2 - 3/4 inches wide with 5 or 6 petals, grow in a dense clustered spike, bright magenta, July - September

Fruit: dry capsules, aging from green to brown—each plant produces approximately 2,000,000 seeds

Habitat Purple loosestrife grows in a wide variety of naturally and humanly disturbed sites in shallow fresh water. It is especially prevalent in roadside ditches, along the shores of streams, rivers, and lakes, and in wetlands. It is tolerant of a wide variety of moisture and nutrient conditions. Prefers slightly acid or neutral soils.

Similar Species

Tall fireweed (*Epilobium angustifolium*) can be mistaken for purple loosestrife because it roughly the same size and also has a terminal spike of magenta flowers. However, its leaves are minutely toothed and its flowers have four, not 5-6 petals. Its leaves are alternate, not opposite or whorled. When not in bloom swamp milkweed (*Asclepias incarnata*) is sometimes confused with purple loosestrife. Both species occupy similar habitats and have opposite leaves, but the stem of swamp milkweed is distinctly round unlike the four to six sided stem of loosestrife. Purple loosestrife's entire, opposite or whorled leaves also distinguish it in its pre-flowering form from goldenrods that have alternate toothed leaves.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Herbs: Alternate, Untoothed Leaves

33

Japanese Knotweed (*Fallopia japonica*)

Smartweed family (*Polygonaceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Deciduous perennial herb grows 4' - 15' H. Large alternate leaves are broadly egg to heart-shaped, square across the base and arise from swollen nodes along the stem. White flowers emerge in August on finger like stems. Often found in huge stands or colonies.



Herbs: Alternate, Untoothed Leaves

33

Japanese Knotweed (*Fallopia japonica*)

Smartweed family (*Polygonaceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Deciduous perennial herb grows 4' - 15' H. Large alternate leaves are broadly egg to heart-shaped, square across the base and arise from swollen nodes along the stem. White flowers emerge in August on finger like stems. Often found in huge stands or colonies.



Description

Japanese Knotweed

Habit: herbaceous perennial growing in large mounded colonies, 4' - 15' in height

Leaves: large, alternate, untoothed, broadly egg-shaped with pointed tips and squarish bases, deciduous

Stems: hollow, swollen nodes similar to bamboo, very colonial, stems often persist through the winter

Flowers: August, profuse, white, growing in slender fingerlike clusters in the leaf axils

Fruit: white, papery, wind-dispersed, X-shaped in cross-section

Note: Primary means of reproduction vegetative. Seed is marginally viable. Often spread in fill materials or compost.

Habitat Generalist—growing in variety of soil types and moisture conditions, primarily in sun. Roadsides, disturbed areas, stream and river shores, and railroad and powerline corridors.

Similar Species

No other herbaceous species resembles Japanese Knotweed. From a distance, this species may resemble a number of clumping shrub species, but knotweed is not woody.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Japanese Knotweed

Habit: herbaceous perennial growing in large mounded colonies, 4' - 15' in height

Leaves: large, alternate, untoothed, broadly egg-shaped with pointed tips and squarish bases, deciduous

Stems: hollow, swollen nodes similar to bamboo, very colonial, stems often persist through the winter

Flowers: August, profuse, white, growing in slender fingerlike clusters in the leaf axils

Fruit: white, papery, wind-dispersed, X-shaped in cross-section

Note: Primary means of reproduction vegetative. Seed is marginally viable. Often spread in fill materials or compost.

Habitat Generalist—growing in variety of soil types and moisture conditions, primarily in sun. Roadsides, disturbed areas, stream and river shores, and railroad and powerline corridors.

Similar Species

No other herbaceous species resembles Japanese Knotweed. From a distance, this species may resemble a number of clumping shrub species, but knotweed is not woody.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Herbs: Alternate, Untoothed Leaves

35

Common Reed (*Phragmites australis*) Grass family (*Poaceae*)



Photo Credit: Christopher Mattrick



For Complete description,
see side 2

KEY IDENTIFIERS:

Tall perennial wetland grass that grows 6' - 20' H. Feathery flower plumes are produced in late July and August. Leaves arise from the stem at swollen nodes. Stem is hollow between nodes. Look for above ground runners—stems growing horizontally instead of vertically.



Herbs: Alternate, Untoothed Leaves

35

Common Reed (*Phragmites australis*) Grass family (*Poaceae*)



Photo Credit: Christopher Mattrick



For Complete description,
see side 2

KEY IDENTIFIERS:

Tall perennial wetland grass that grows 6' - 20' H. Feathery flower plumes are produced in late July and August. Leaves arise from the stem at swollen nodes. Stem is hollow between nodes. Look for above ground runners—stems growing horizontally instead of vertically.



Description

Common Reed

Habit: erect, tall perennial wetland grass that grows 6' - 20' in height

Leaves: leaves are .8" - 1.2" wide and arise from swollen nodes along the stem

Stems: hollow between nodes giving plants a bamboo-like appearance

Flowers: distinctive purplish-brown flower plume appears in late July—stems and plumes, turn gray and fluffy, persisting through the winter, making spring identification easy

Note: The reproductive strategy of this species is primarily vegetative; both above ground runners and below ground rhizomes help the species colonize areas to the exclusion of other species. Only a small percentage of the seed becomes viable in the year it is produced. A higher percentage of seed become viable after over-wintering

Habitat Common reed grows in sunny wetland habitats in fresh or brackish water. It prefers quiet waters because its stems break easily. It grows in drier elevated marshes but will also grow along lakeshores, riverbanks, and other moist areas. Soil disturbance assists this species in colonizing an area.

Similar Species

There is no other grass in our region that grows as tall as common reed. However, earlier in the season when it has not attained its full height, it might be confused with other grasses. However, it is quite coarse even at this stage, its leaves being more or less one inch wide. Its highly colonial nature and above ground runners are evident even in young stands.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Common Reed

Habit: erect, tall perennial wetland grass that grows 6' - 20' in height

Leaves: leaves are .8" - 1.2" wide and arise from swollen nodes along the stem

Stems: hollow between nodes giving plants a bamboo-like appearance

Flowers: distinctive purplish-brown flower plume appears in late July—stems and plumes, turn gray and fluffy, persisting through the winter, making spring identification easy

Note: The reproductive strategy of this species is primarily vegetative; both above ground runners and below ground rhizomes help the species colonize areas to the exclusion of other species. Only a small percentage of the seed becomes viable in the year it is produced. A higher percentage of seed become viable after over-wintering

Habitat Common reed grows in sunny wetland habitats in fresh or brackish water. It prefers quiet waters because its stems break easily. It grows in drier elevated marshes but will also grow along lakeshores, riverbanks, and other moist areas. Soil disturbance assists this species in colonizing an area.

Similar Species

There is no other grass in our region that grows as tall as common reed. However, earlier in the season when it has not attained its full height, it might be confused with other grasses. However, it is quite coarse even at this stage, its leaves being more or less one inch wide. Its highly colonial nature and above ground runners are evident even in young stands.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Herbs: Alternate, Untoothed Leaves

37

Cypress Spurge (*Euphorbia cyparissias*)

Spurge family (*Euphorbiaceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Loosely erect herbaceous plant that is 6" - 12" H with milky sap. Numerous alternate, entire, needlelike leaves under 1" long, either opposite or whorled, and very soft. Yellowish to greenish flowers with saucer shaped bracts grow in a broad terminal umbel and bloom spring to early summer.



Herbs: Alternate, Untoothed Leaves

37

Cypress Spurge (*Euphorbia cyparissias*)

Spurge family (*Euphorbiaceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Loosely erect herbaceous plant that is 6" - 12" H with milky sap. Numerous alternate, entire, needlelike leaves under 1" long, either opposite or whorled, and very soft. Yellowish to greenish flowers with saucer shaped bracts grow in a broad terminal umbel and bloom spring to early summer.



Description

Cypress Spurge

Habit: loosely erect herbaceous plant that is 6" - 12" in height, grows in colonies

Leaves: numerous alternate, entire, needlelike leaves under 1" long and very soft to the touch

Stems: leafy stem looks similar to that of rosemary

Flowers: spring to early summer, yellow-green flowers with saucer shaped bracts grow in a broad terminal umbel

Note: Cypress spurge is a colonial species, spreading aggressively by rhizomes.

Habitat Cypress spurge grows on roadsides, waste places, and along river shores. It is especially common in highly disturbed habitats.

Similar Species

There are no native species that have such a leafy stem and yellow saucer-like flowers. The milky sap is another good way of assuring the identity of this plant. Leafy spurge, a related species, is much larger, growing to 8" - 36" in height, with leaves up to 3" long.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Cypress Spurge

Habit: loosely erect herbaceous plant that is 6" - 12" in height, grows in colonies

Leaves: numerous alternate, entire, needlelike leaves under 1" long and very soft to the touch

Stems: leafy stem looks similar to that of rosemary

Flowers: spring to early summer, yellow-green flowers with saucer shaped bracts grow in a broad terminal umbel

Note: Cypress spurge is a colonial species, spreading aggressively by rhizomes.

Habitat Cypress spurge grows on roadsides, waste places, and along river shores. It is especially common in highly disturbed habitats.

Similar Species

There are no native species that have such a leafy stem and yellow saucer-like flowers. The milky sap is another good way of assuring the identity of this plant. Leafy spurge, a related species, is much larger, growing to 8" - 36" in height, with leaves up to 3" long.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Herbs: Alternate, Untoothed Leaves

39

Sheep Sorrel (*Rumex acetosella*)

Smartweed family (*Polygonaceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Persistent/abundant plant found primarily along roads. Herbaceous perennial which grows 4" - 15" H. Alternate, narrow, untoothed leaves, usually with arrow-shaped, flaring lobes which distinguish this plant from similar species. Reddish or greenish flowers grow in branching leafless racemes.



Herbs: Alternate, Untoothed Leaves

39

Sheep Sorrel (*Rumex acetosella*)

Smartweed family (*Polygonaceae*)



Photo Credit: Mo Ewing



For Complete description,
see side 2

KEY IDENTIFIERS:

Persistent/abundant plant found primarily along roads. Herbaceous perennial which grows 4" - 15" H. Alternate, narrow, untoothed leaves, usually with arrow-shaped, flaring lobes which distinguish this plant from similar species. Reddish or greenish flowers grow in branching leafless racemes.



Description

Sheep Sorrel

Habit: upright herbaceous perennial growing about 4' - 15' in height

Leaves: narrow, untoothed, alternate, arrow-shaped with flaring lobes at the base

Stems: jointed

Flowers: reddish or greenish flowers have six indistinguishable parts; grow in branching leafless racemes

Habitat Roadsides, waste places, old fields, recently disturbed sites. Often abundant, but will die out as succession proceeds.

Similar Species

The untoothed arrow-shaped leaves with flaring lobes distinguish this plant from all others.

Note: Please REPORT POPULATIONS that occur anywhere **except roadsides, yards or gardens.**

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Sheep Sorrel

Habit: upright herbaceous perennial growing about 4' - 15' in height

Leaves: narrow, untoothed, alternate, arrow-shaped with flaring lobes at the base

Stems: jointed

Flowers: reddish or greenish flowers have six indistinguishable parts; grow in branching leafless racemes

Habitat Roadsides, waste places, old fields, recently disturbed sites. Often abundant, but will die out as succession proceeds.

Similar Species

The untoothed arrow-shaped leaves with flaring lobes distinguish this plant from all others.

Note: Please REPORT POPULATIONS that occur anywhere **except roadsides, yards or gardens.**

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Herbs: Alternate, Toothed Leaves

41

Garlic Mustard (*Alliaria petiolata*)

Mustard family (*Brassicaceae*)



Photo Credit: John Lynch



For Complete description,
see side 2

KEY IDENTIFIERS:

Upright, usually unbranched biennial herb, 1' - 3' H. White four petaled flowers in spring and early summer. Stem leaves alternate and coarsely toothed, with basal leaves scallop-edged, and round. Leaves smell strongly of garlic. Seeds are contained in erect, slender pods. Basal leaves persist through winter.



Herbs: Alternate, Toothed Leaves

41

Garlic Mustard (*Alliaria petiolata*)

Mustard family (*Brassicaceae*)



Photo Credit: John Lynch



For Complete description,
see side 2

KEY IDENTIFIERS:

Upright, usually unbranched biennial herb, 1' - 3' H. White four petaled flowers in spring and early summer. Stem leaves alternate and coarsely toothed, with basal leaves scallop-edged, and round. Leaves smell strongly of garlic. Seeds are contained in erect, slender pods. Basal leaves persist through winter.



Description

Garlic Mustard

Habit: upright, usually unbranched biennial herb, growing 1'-3' feet in height

Leaves: leaves often smell strongly of garlic when crushed, especially in the spring; biennial first-year plants produce a basal rosette of round scalloped edged leaves that remain green throughout winter; second year plants have alternate, long-stalked triangular to heart-shaped leaves, coarsely toothed or scalloped edged, 1" - 2.5" wide

Flowers: spring and early summer, white four petalled flowers produced by second year plants are 1/4" - 1/3" wide growing in a button-like cluster

Fruit: seeds are contained in erect, slender pods known as siliques which ripen from green to pale brown, splitting to reveal shiny black seeds

Note: Plants are easily recognized after flowering, by the erect dead stalks and pale brown seedpods that persist through the summer months or by the rosettes of first-year plants.

Habitat Frequently found in moist, shaded soil of river floodplains, forests, roadsides and edges of woods, trails, or forest openings. It prefers soils which are disturbed on a regular basis and is most abundant in calcareous soils. Prefers shaded sites but has adapted to grow in full sun.

Similar Species

Garlic mustard is somewhat like other species in the mustard family, but there are none with the combination of long-stalked triangular or heart-shaped leaves with coarse teeth and white flowers.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.

Description

Garlic Mustard

Habit: upright, usually unbranched biennial herb, growing 1'-3' feet in height

Leaves: leaves often smell strongly of garlic when crushed, especially in the spring; biennial first-year plants produce a basal rosette of round scalloped edged leaves that remain green throughout winter; second year plants have alternate, long-stalked triangular to heart-shaped leaves, coarsely toothed or scalloped edged, 1" - 2.5" wide

Flowers: spring and early summer, white four petalled flowers produced by second year plants are 1/4" - 1/3" wide growing in a button-like cluster

Fruit: seeds are contained in erect, slender pods known as siliques which ripen from green to pale brown, splitting to reveal shiny black seeds

Note: Plants are easily recognized after flowering, by the erect dead stalks and pale brown seedpods that persist through the summer months or by the rosettes of first-year plants.

Habitat Frequently found in moist, shaded soil of river floodplains, forests, roadsides and edges of woods, trails, or forest openings. It prefers soils which are disturbed on a regular basis and is most abundant in calcareous soils. Prefers shaded sites but has adapted to grow in full sun.

Similar Species

Garlic mustard is somewhat like other species in the mustard family, but there are none with the combination of long-stalked triangular or heart-shaped leaves with coarse teeth and white flowers.

Illustrations reprinted with permission from Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada, edited by N. H. Holmgren and Collaborators, copyright 1998, The New York Botanical Garden Press.