

Silverthorn, Thorny Olive

SHRUBS



March

T. Bodner



April



October



April

***Elaeagnus pungens* Thunb. ELPU2**

Plant. Evergreen, densely bushy shrub 3 to 25 feet (1 to 8 m) in height, with long limber projecting shoots, scattered thorny branches. Thick leaves, silver-brown scaly beneath. Often found as escaped single plants from animal-dispersed seeds.

Stem. Multiple stems and densely branched. Twigs brown and dense with brown scales and hairy when young. Short shoots with small leaves becoming sharp-branched or unbranched thorns 0.4 to 1.6 inches (1 to 4 cm) long, and in second year producing leafy lateral branches, followed by flowers in fall. Lateral branches distinctly long, limber, and in late summer to spring extending beyond bushy crown and ascending into trees. Bark dark drab and rough with projecting thorns.

Leaves. Alternate, oval to elliptic and thick, 0.4 to 4 inches (1 to 10 cm) long and 0.2 to 2 inches (0.6 to 5 cm) wide. Irregular and wavy margins. Blade surfaces silver scaly in spring becoming dark green or brownish green above and densely silver scaly with scattered brown scales beneath. Petioles 0.1 to 0.2 inch (4 to 5 mm) long, grooved above.

Flowers. November to December. Axillary clusters, each with one to three flowers, 0.4 inch (1 cm) long, silvery white to brown. Tubular with four lobes. Fragrant.

Fruit and seeds. March to June. Oblong, juicy drupe, 0.3 to 0.6 inch (1 to 1.5 cm) long, containing one nutlet. Whitish ripening to red and finely dotted with brown scales. Persistent shriveled calyx tube at tip.

Ecology. Fast-growing, weedy ornamental. Tolerant to shade, drought, and salt. Spreads by animal-dispersed seeds and occurs as scattered individuals, both in the open and under forest shade. Increases in size by prolific stem sprouts. Can climb into trees.

Resembles autumn olive, *E. umbellata* Thunb., and Russian olive, *E. angustifolia* L., both of which are deciduous and are further described in this book. Autumn olive has thin leaves with silver scales (not silver brown) and abundant reddish rounded berries in fall and early winter. Russian olive has silver scaly twigs and leaf surfaces, and many yellow olives in fall and winter.

History and use. Introduced as an ornamental from China and Japan in 1830. Frequently planted for hedgerows and on highway right-of-ways and still used for landscaping.

States with suspected infestations are shown in gray.

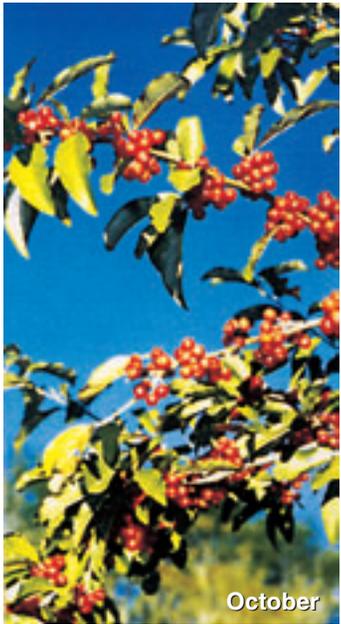
**Silverthorn, Thorny Olive****2037**

SHRUBS

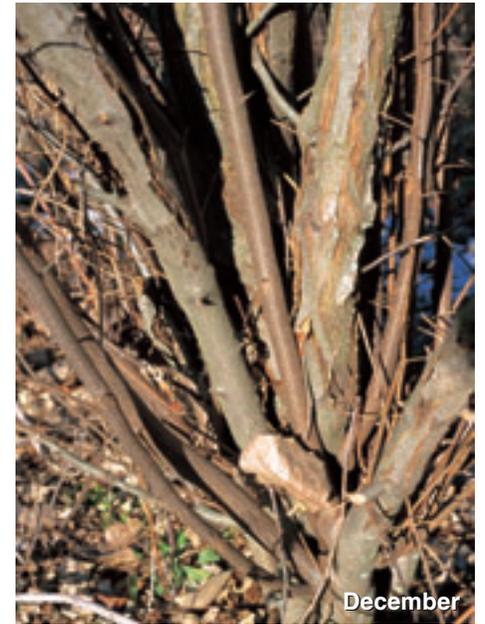
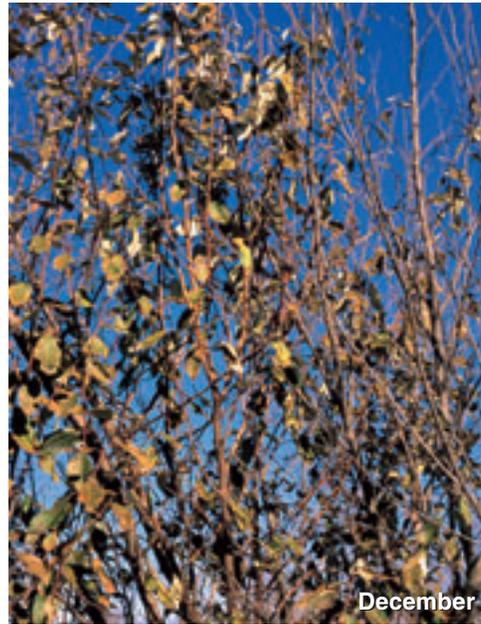
October

Autumn Olive

SHRUBS



J. Gibson



Elaeagnus umbellata Thunb. ELUM

Plant. Tardily deciduous bushy leafy shrub, 3 to 20 feet (1 to 6 m) in height, with scattered thorny branches. Leaves silvery scaly beneath, with many red berries in fall.

Stem. Twigs slender and silver scaly, spur twigs common, with some lateral twigs becoming pointed like thorns. Branches and main stems glossy olive drab with scattered thorns and many whitish dots (lenticels), becoming light gray to gray brown with age and eventually fissuring to expose light-brown inner bark.

Leaves. Alternate, elliptic 2 to 3 inches (5 to 8 cm) long and 0.8 to 1.2 inches (2 to 3 cm) wide. Margins entire and wavy. Bright green to gray green above with silver scaly midvein and densely silver scaly beneath. Petioles short and silvery.

Flowers. February to June. Axillary clusters, each with 5 to 10 tubular flowers with 4 lobes. Silvery white to yellow. Fragrant.

Fruit and seeds. August to October. Round, juicy drupe 0.3 to 0.4 inch (7 to 10 mm) containing one nutlet. Red and finely dotted with silvery to silvery-brown scales.

Ecology. Prefers drier sites. Shade tolerant. Spreads by animal-dispersed seeds and found as scattered plants in forest openings and open forests, eventually forming dense stands. A nonleguminous nitrogen fixer.

Resembles silverthorn or thorny olive, *E. pungens* Thunb., and Russian olive, *E. angustifolia* L. Silverthorn is an evergreen that has brown scaly and hairy twigs, flowers in late fall, and few reddish-silver scaly drupes in spring. Russian olive has silver scaly twigs and leaves, flowers in early summer, and many yellow olives in fall and winter. **Also resembles** minniebush, *Menziesia pilosa* (Michx. ex Lam.) Juss. ex Pers., a Southern Appalachian native at high elevations, which is distinguished by glands, not scales, on the midvein and leaves with finely serrate margins.

History and use. Introduced from China and Japan in 1830. Widely planted for wildlife habitat, strip mine reclamation, and shelterbelts.

States with suspected infestations are shown in gray.

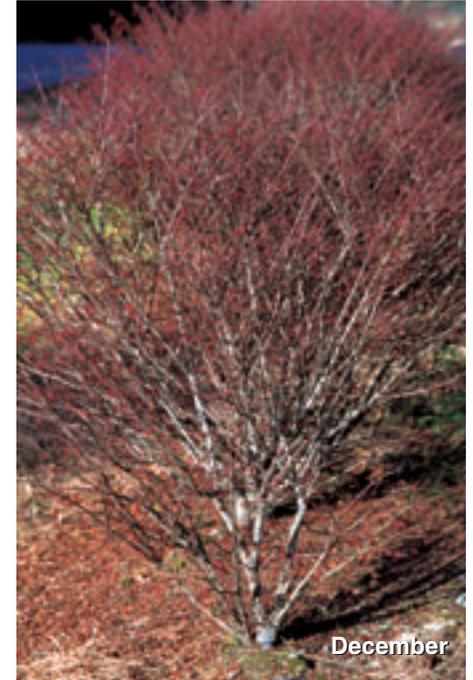
**Autumn Olive****2038**

December

J. Gibson

Winged Burning Bush

SHRUBS



***Euonymus alata* (Thunb.) Sieb. EULA8**

Synonyms: wahoo, winged euonymus, burning bush

Plant. Deciduous, wing-stemmed, bushy shrub to 12 feet (4 m) in height, multiple stemmed and much branched. Canopy broad and leafy. Small and obovate leaves green and turning bright scarlet to purplish red in fall. Paired purple fruit in fall.

Stem. Four corky wings or ridges appearing along young lime-green squarish twigs and becoming wider with age. Numerous opposite branches, with bases encircled by corky rings. Larger branches and bark becoming light gray.

Leaves. Opposite, obovate, and thin, only 1 to 2 inches (2.5 to 5 cm) long and 0.4 to 0.8 inch (1 to 2 cm) wide. Tips tapering to an acute point. Margins finely crenate. Both surfaces smooth and hairless. Dark green with whitish midvein above and light green beneath turning bright crimson to purplish red in fall. Petioles 0.04 to 0.16 inches (1 to 4 mm) long.

Flowers. April to May. Axillary pairs of small flowers at the ends of a Y-shaped 1-inch (2.5-cm) stem. Flowers inconspicuous, 0.2 to 0.3 inch (6 to 8 mm) across, greenish-yellow, five-lobed, pistil elongating as fruit forms.

Fruit and seeds. August to January. Dangling paired (or single) reddish capsules in leaf axils turning purple and splitting in fall to reveal an orange fleshy-covered seed.

Ecology. Shade tolerant. Colonizes by root suckers and spreads by animal-dispersed seeds.

Resembles the larger leaved species of blueberry, *Vaccinium* spp., but their leaves are alternate. **Possibly resembles** rusty blackhaw, *Viburnum rufidulum* Raf., which also has opposite leaves, but distinguished by their larger size and leathery texture. Dormant twigs **may resemble** winged elm, *Ulmus alata* Michx., and sweetgum, *Liquidambar styraciflua* L., which are usually two-winged instead of four-winged.

History and use. Introduced from northeast Asia in the 1860s. Widely planted as an ornamental and for highway beautification.

States with suspected infestations are shown in gray.

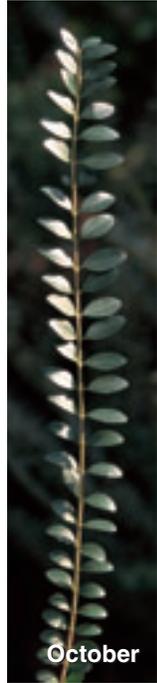
**Winged Burning Bush****2042**

April

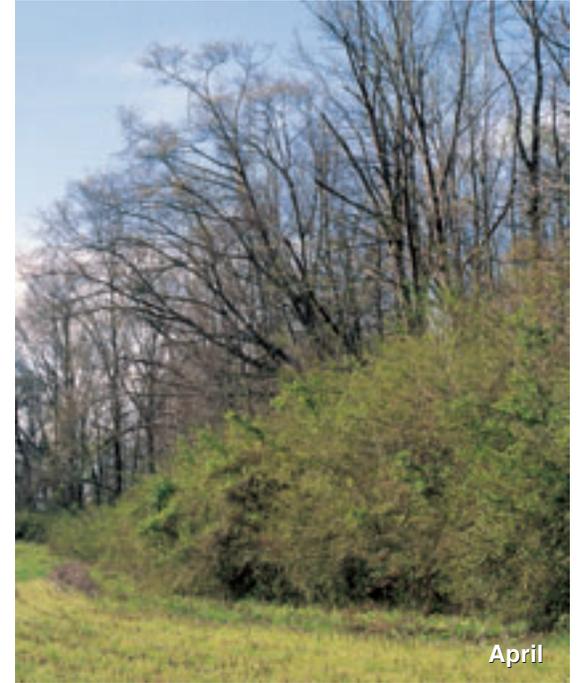
Chinese/European Privet



T. Bodner



T. Bodner



Chinese privet shown in all images



T. Bodner



***Ligustrum sinense* Lour./*L. vulgare* L. LISI/LIVU**

Plant. Semievergreen to evergreen, thicket-forming shrubs to 30 feet (9 m) in height that are multiple stemmed and leaning-to-arching with long leafy branches. Essentially indistinguishable except at flowering. Chinese privet is the most widely occurring.

Stem. Opposite or whorled, long slender branching that increases upward with twigs projecting outward at near right angles. Brownish gray turning gray green and short hairy (rusty or grayish) with light dots (lenticels). Leaf scars semicircular with one bundle scar. Bark brownish gray to gray and slightly rough (not fissured).

Leaves. Opposite in two rows at near right angle to stem, ovate to elliptic with rounded tip (often minutely indented), 0.8 to 1.6 inches (2 to 4 cm) long and 0.4 to 1.2 inches (1 to 3 cm) wide. Margins entire. Lustrous green above and pale green with hairy midvein beneath (European privet not hairy beneath). Petioles 0.04 to 0.2 inch (1 to 5 mm) long, rusty hairy. Leaves usually persistent during winter.

Flowers. April to June. Abundant, terminal and upper axillary clusters on short branches forming panicles of white flowers. Corolla four-lobed, tube 0.06 to 0.1 inch (1.5 to 2 mm) long and equal or shorter than the lobes, with stamens extending from the corolla on Chinese privet and within the corolla on European privet. Fragrant.

Fruit and seeds. July to February. Dense ovoid drupes hanging or projecting outward, 0.2 to 0.3 inch (6 to 8 mm) long and 0.16 inch (4 mm) wide, containing one to four seeds. Pale green in summer ripening to dark purple and appearing almost black in late fall to winter.

Ecology. Aggressive and troublesome invasives, often forming dense thickets, particularly in bottom-land forests and along fencerows, thus gaining access to forests, fields, and right-of-ways. Shade tolerant. Colonize by root sprouts and spread widely by abundant bird- and other animal-dispersed seeds.

Resemble Japanese privet, *L. japonicum* Thunb., which has larger leaves and is further described in this book. **Also resemble** upland swampprivet, *Forestiera ligustrina* (Michx.) Poir., which occurs mainly on rocky sites and has short twigs and sparse flowers and fruit.

History and use. Introduced from China and Europe in the early to mid-1800s. Traditional southern ornamentals. Deer browse Chinese privet sprouts.

States with suspected infestations are shown in gray.

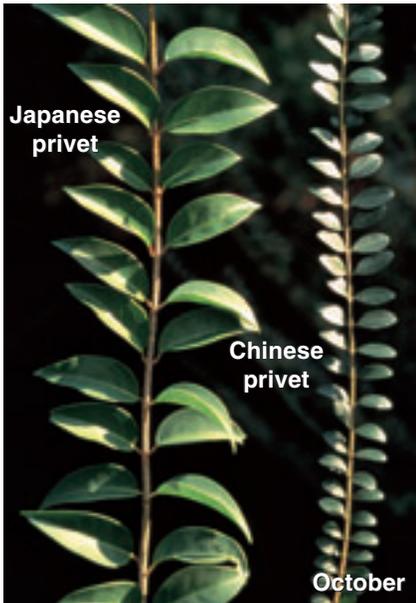
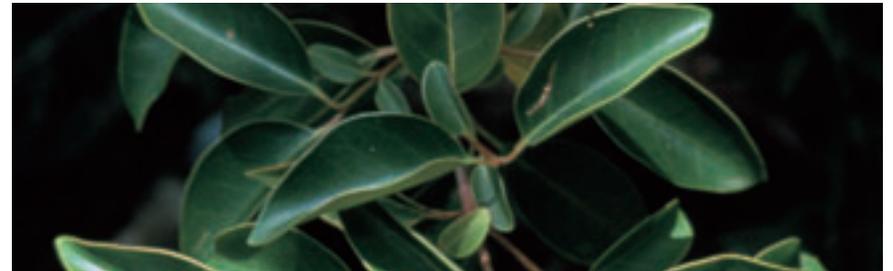
**Chinese/European Privet****2103**

SHRUBS

May

Japanese Privet

SHRUBS



T. Bodner

***Ligustrum japonicum* Thunb. LIJA**

Plant. Evergreen to 35 feet (10 m) in height, with an upward spreading crown, thick opposite leaves, clusters of showy white flowers in spring, and dangling green to purple fruit in summer and winter.

Stem. Twigs hairless and pale green becoming brownish to reddish tinged. Branches opposite and brownish gray with many raised corky dots (lenticels). Bark light gray and smooth except for scattered horizontal, discontinuous ridges.

Leaves. Opposite, leathery, ovate, base rounded and tips blunt or tapering often with a tiny sharp tip. Two to four inches (5 to 10 cm) long and 1 to 1.8 inches (2.5 to 4.5 cm) wide. Margins entire and light green to reddish tinged. Upper blades black green with light-green mid- and lateral veins; lower blades light green. Petioles 0.4 to 0.8 inch (1 to 2 cm) long, light green and sometimes reddish tinged.

Flowers. April to June. Loosely branching, terminal- and upper-axillary, conical clusters of many small white four-petaled flowers. Fragrant.

Fruit and seeds. July to February. Conical-shaped, branched terminal clusters of ovoid drupes, each 0.2 to 0.5 inch (5 to 12 mm) long and 0.2 inch (5 mm) wide. Pale green in summer ripening to blue black in winter.

Ecology. Single plant or thicket-forming, occurring in the same habitats as Chinese privet, but generally not as abundant, depending upon location. Invades both lowland and upland habitats. Shade tolerant. Colonizes by root sprouts and spreads by abundant bird- and other animal-dispersed seeds.

Resembles Chinese privet, *L. sinense* Lour., which has smaller and thinner leaves, is often shorter, and is further described in this book. **Also resembles** redbtip, also named photinia, *Photinia x fraseri* Dress, an ornamental shrub that has similar but alternate leaves.

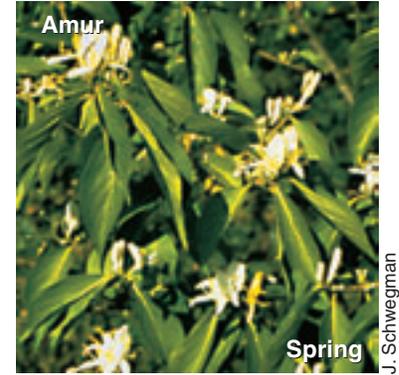
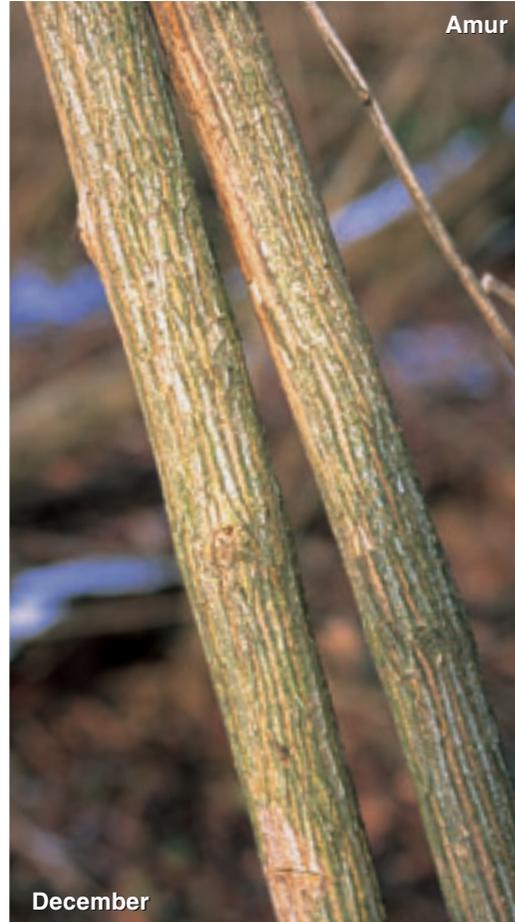
History and use. Introduced from Japan and Korea in 1845. Widely planted as an ornamental and escaped.

States with suspected infestations are shown in gray.

**Japanese Privet****2104**

June

Bush Honeysuckles



Amur honeysuckle, *Lonicera maackii* (Rupr.) Herder **LOMA6**
Morrow's honeysuckle, *L. morrowii* Gray **LOMO2**
Tatarian honeysuckle, *L. tatarica* L. **LOTA**
Sweet-breath-of-spring, *L. fragrantissima* Lindl. & Paxton **LOFR**

Plant. Tardily deciduous, upright, arching-branched shrubs. Amur to 30 feet (9 m) in height and spindly in forests, Morrow's to 6.5 feet (2 m) in height, and Tatarian and sweet-breath-of-spring to 10 feet (3 m) in height. Much branched and arching in openings, multiple stemmed, dark-green opposite leaves, showy white to pink or yellow flowers, and abundant orange to red berries.

Stem. Opposite branched, light tan with braided-strand appearance. Bark often flaking. Older branches hollow.

Leaves. Opposite in two rows, ovate to oblong with rounded to subcordate bases, 1.2 to 4 inches (3 to 10 cm) long. Persistent into winter. Margins entire. Amur tapering to a long slender tip; others with short pointed tips. Morrow's with wrinkled upper surface and soft-hairy lower surface, others with hairless leaves. Petioles 0.1 to 0.4 inch (2.5 to 10 mm) long.

Flowers. February to June. Axillary, bracted short-stemmed clusters, each with one to several white to yellow (some pink to red) flowers. Petals tubular flaring to five lobes in two lips (upper lip four-lobed, lower lip single-lobed). Five extended stamen. Fragrant.

Fruit and seeds. August to February. Abundant spherical, glossy berries paired in leaf axils, each 0.2 to 0.5 inch (6 to 12 mm). Green becoming pink and ripening to red (sometimes yellow or orange). Usually persistent into winter.

Ecology. Often forms dense thickets in open forests, forest edges, abandoned fields, pastures, roadsides, and other open upland habitats. Relatively shade tolerant. Colonize by root sprouts and spread by abundant bird- and other animal-dispersed seeds. Seeds long-lived in the soil.

Resemble the woody vine, Japanese honeysuckle, *L. japonica* Thunb, as far as leaves and flowers.

History and use. All introduced from Asia in the 1700s and 1800s. Mistakenly used as ornamentals and wildlife plants.

States with suspected
infestations are
shown in gray.



Bush Honeysuckles

2105

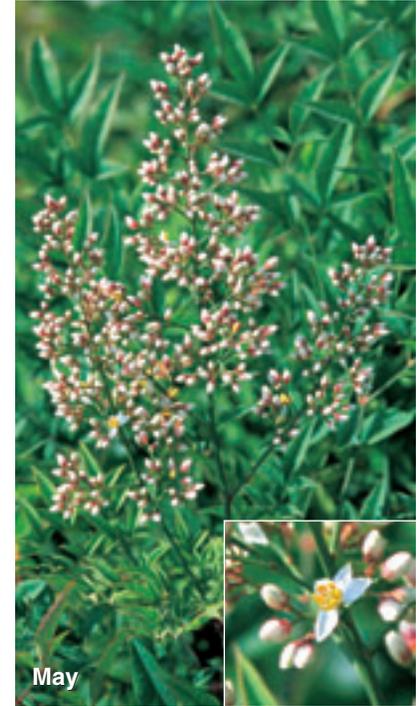


Amur honeysuckle

November

Sacred Bamboo, Nandina

SHRUBS



F. Naiton

Nandina domestica Thunb. **NADO**

Plant. Evergreen erect shrub to 8 feet (2.5 m) in height, with multiple bushy stems that resemble bamboo, glossy bipinnately compound green (or reddish) leaves, white to pinkish flowers in terminal clusters, and bright red berries in fall and winter.

Stem. Large compound leaves resembling leafy branches, woody leafstalk bases persisting as stubby branches, and overlapping sheaths encasing the main stem. Stubby branches whorled alternately up the stem and tightly stacked near terminals for a given year's growth. The overlapping sheaths on the main stem give the appearance of bamboo, thus, the common name. Stem fleshy and greenish gray near terminal, becoming woody barked and tan to brown with fissures towards the base. Wood bright yellow.

Leaves. Alternately whorled, bipinnately compound on 1.5 to 3 feet (0.5 to 1 m) slender leafstalks, often reddish tinged with joints distinctly segmented. Leafstalk bases clasping stems with a V-notch on the opposite side of attachment. Nine to eighty-one nearly sessile leaflets, lanceolate to diamond-shaped, 0.5 to 4 inches (1.2 to 10 cm) long and 0.4 to 1.2 inches (1 to 3 cm) wide. Glossy light green to dark green sometimes red tinged or burgundy.

Flowers. May to July. Terminal (or axillary) panicles of several hundred flowers, 4 to 10 inches (10 to 25 cm) long. Pink in bud, opening to three (two to four) lanceolate deciduous petals, white to cream, with yellow anthers 0.2 to 0.3 inch (6 to 8 mm) long. Fragrant.

Fruit and seeds. September to December. Dense terminal and axillary clusters of fleshy, spherical berries 0.2 to 0.3 inch (6 to 8 mm). Light green ripening to bright red. Two hemispherical seeds.

Ecology. Occurs under forest canopies and near forest edges. Shade tolerant. Seedlings frequent in vicinity of old plantings. Varying leaf colors in the various cultivars, some of which do not produce viable seeds. Colonizes by root sprouts and spreads by animal-dispersed seeds.

History and use. Introduced from eastern Asia and India in the early 1800s. Widely planted as an ornamental, now escaped and spreading from around old homes.

States with suspected infestations are shown in gray.

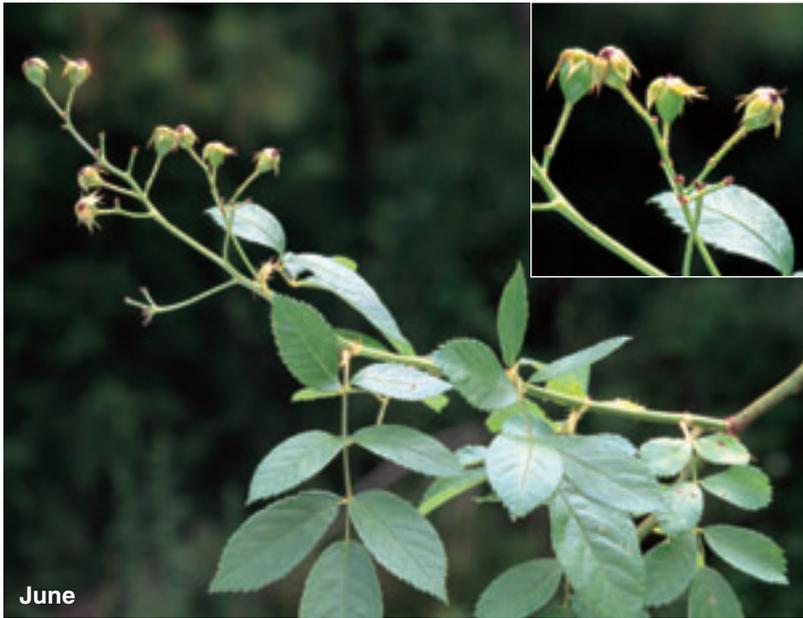
**Sacred Bamboo, Nandina****2113**

Nonnative Roses

SHRUBS



Multiflora rose shown in all images



T. Bodner

Multiflora rose, *Rosa multiflora* Thunb. ex Murr. **ROMU**
Macartney rose, *R. bracteata* J.C. Wendl. **ROBR**
Cherokee rose, *R. laevigata* Michx. **ROLA**

Plant. All deciduous except Cherokee. Erect climbing, arching, or trailing shrubs to 10 feet (3 m) in height or length. Clump forming. Pinnately compound leaves, frequent recurved and straight thorns, clustered or single white flowers in early summer, and red rose hips in fall to winter.

Stem. Long arching or climbing by clinging using recurved or straight thorns. Green with leaf and branch scars linear and spaced like nodes. Flower buds of multiflora often red in winter. Bark dark brown with streaks of light brown or green.

Leaves. Alternate, odd-pinnately compound with three to nine elliptic to lanceolate leaflets, each 1 to 3 inches (2.5 to 8 cm) long. Margins finely and sharply serrate. Leafstalk bases clasping, channeled, and often bristled on margins with toothed hairs.

Flowers. April to June. Terminal or axillary branched clusters or single flowers. Five white petals. Many yellow anthers in center.

Fruit and seeds. July to December. Rose hip, spherical, and fleshy, 0.25 to 0.4 inch (0.6 to 1 cm). Green to yellow and ripening to glossy red.

Ecology. Form small-to-large infestations often climbing up into trees. Multiflora widely planted and often spreading along right-of-ways and invading new forests and forest margins. Colonize by prolific sprouting and stems that root, and spread by animal-dispersed seeds.

Resemble native Carolina rose, *R. carolina* L., swamp rose, *R. palustris* Marsh., and climbing rose, *R. setigera* Michx., all of which have pink flowers in spring and nonbristled leafstalk bases, but none forming extensive infestations except swamp rose in wet habitat.

History and use. Introduced from Asia. Traditionally planted as ornamentals, livestock containment, and wildlife habitat. Multiflora widely planted for "living fences" or screening.

States with suspected
infestations are
shown in gray.



Nonnative Roses

2160

