

Problem-free Shrubs for Virginia Landscapes

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The most effective form of plant disease control in the landscape is prevention. Disease prevention can be as simple as choosing the right plant for the right place at planting time. This fact sheet was developed as a guide to shrubs that generally experience few problems in Virginia landscapes. Using these species for new plantings should help you avoid troublesome disease and insect problems in your landscape.

All of the species or cultivars described have been chosen for their relative disease- and insect-free qualities and their desirable horticultural attributes. The list was reviewed by a plant pathologist, an entomologist, and a horticulturist and includes information on some of the pertinent cultural characteristics of each species to help you decide whether the shrub is the right choice for the landscape you have in mind. Plants marked with an asterisk (*) are native to Virginia and recommended by the Virginia Native Plant Society.

A short list of shrub species that tend to have chronic problems and should, with some exceptions, be avoided is also included in this fact sheet. Although species listed as "problem shrubs" tend to have chronic problems in the landscape, disease- and insect-resistant cultivars of some of these species may be available. Consult your local nursery personnel or Extension agent for recommendations on the latest cultivars.

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***Berberis x gladwynensis* 'William Penn' (William Penn barberry)** is a medium, evergreen shrub that is armed with spines. This densely growing barberry has somewhat showy (upon close inspection) yellow flowers in spring and is relatively drought-tolerant. William Penn barberry is typically used as a low hedge or in border plantings. Some winter damage can occur in Zone 6a.

*Cepalanthus occidentalis** (**buttonbush**) is a large shrub that produces white flowers in globular heads in June, July, and August. Buttonbush is somewhat lanky, but is a good choice for informal landscapes. It does best in moist soil and does not tolerate drought





Clethra alnifolia* (sweet pepperbush) is tolerant of wet soils. It tends to form colonies slowly, and the cultivar 'Sixteen Candles' remains compact. Its very fragrant white flowers open in July. Pictured here is the pink-flowered cultivar 'Rosea'.





***Cornus alba* (Tatarian dogwood)** has beautiful, red stems. Although several diseases are reported to occur on this species, experience shows that disease problems are rare on *C. alba* in Virginia landscapes. Japanese beetles can be a problem and borers sometimes follow mechanical injury to the plants. *C. alba* is quite vigorous and can sometimes overgrow neighboring shrubs. Variegated cultivars, such as the one pictured here, are available.





***Cornus mas* (Corneliancherry dogwood)** is a large, multi-stemmed shrub or small tree. It has attractive, flaky bark and small but showy, yellow flowers in early spring. Several cultivars, including variegated ones, are available.





***Forsythia x intermedia* (border forsythia)** is a common, large, fast-growing shrub that suffers few disease and insect problems, but needs frequent grooming. Phomopsis gall, a fungal disease associated with dieback, is occasionally a problem on forsythia stems. Border forsythia is adaptable to a wide range of soils. Full sun is best for flowering.



***Fothergilla gardenii* (dwarf fothergilla)** is a medium, multistemmed shrub species. It has beautiful flowers (April) and fall foliage color, but is slightly less showy than *F. major*. It flowers and shows its fall colors best in full sun. Dwarf fothergilla requires a moist, well-drained acid soil and does not tolerate drought.



***Fothergilla major* (large fothergilla)** is a rounded, multi-stemmed shrub that has exceptional fall color and essentially no disease problems. It must be planted in acid soil and does not do well in dry soil. (no photograph)

***Hydrangea arborescens* * (smooth hydrangea)** is a low-growing, native shrub that produces pretty white flowers in July. It prefers partial shade, but can be grown in full sun with

supplemental water. It can be cut back every year because it flowers on new wood. Pictured here is the cultivar 'Annabelle'.



***Hydrangea macrophylla* (bigleaf hydrangea)** is a rounded shrub that prefers moist, well-drained soil. Flower color varies, depending on the acidity of the soil. It is blue in acid soil (< pH 5.5) and pink in alkaline soil. Flower buds may be killed in Zone 6a, but this species does well from Roanoke eastward. Cultivars that vary in hardiness and flower type, and cultivars that flower on new wood, are available.



***Hydrangea quercifolia* (oakleaf hydrangea)** is an upright shrub with nice fall foliage color and leaves that remain on the plant until late in the fall. It grows best in moist, well-drained soil and in sun to partial shade. Many cultivars that vary in size and flower characteristics are available.



***Ilex cornuta*¹ (Chinese holly)** does well in Zones 6b-8 in Virginia. It is a beautiful evergreen shrub that withstands heat and drought. A few cultivars of this species have leaves with very sharp teeth (e.g., 'Rotunda', photo lower right) and one must be careful where such cultivars are placed. The cultivar 'Burfordii' has a single spine at the tip of the leaf (far left and middle photos below). Some diseases are reported, but we rarely see them in Virginia. Scales, followed by sooty mold, can be a problem on this and other holly species, however.





*Ilex verticillata** (winterberry) does well in both heavy and light soils, but is native to swampy areas and prefers moist, acid soils high in organic matter. It produces persistent red berries that are a nice accent to the winter landscape. At least one male plant must be planted among female plants for fruit production. The cultivar 'Winter Red' is a prolific fruit-producer. Compact, dwarf cultivars, such as 'Red Sprite,' are also available.



***Ilex vomitoria**¹** (Yaupon holly) is adapted to both dry and wet soils. Like other hollies, it is susceptible to scales and sooty mold. *I. vomitoria* is suitable for Zones 7-9. There are several cultivars, which vary in size and form. Pictured here is the dwarf cultivar 'Nana'.



¹ Although both *I. cornuta* and *I. vomitoria* are susceptible to scales and sooty mold, they are included because few other evergreen shrubs are listed and these species of *Ilex* do perform well in many landscapes.

***Juniperus chinensis* (Chinese juniper)** is a large shrub or a tree. Like all junipers, it needs full sun. Many cultivars are susceptible to the fungal diseases, Phomopsis blight and Kabatina tip blight, but some cultivars, such as 'Keteleeri,' 'Pfitzeriana' (pictured left), 'Pfitzeriana Aurea' (middle photo), var. *sargentii*, and var. *sargentii* 'Glauca' have resistance to these diseases. The upright cultivar pictured on the right is 'Torulosa.'





***Juniperus conferta* (shore juniper)** has lush, soft foliage when grown in the right soil. The main problem seen on this species is stress from being planted in poorly drained soils. Shore juniper can tolerate dry, sandy soils, but does poorly in heavy, clay soils. The prevalent cultivar in the trade is 'Blue Pacific,' pictured here.



***Mahonia bealei* (leatherleaf mahonia)**, like *M. aquifolium*, bears beautiful blue fruit and requires shade. It bears lemon-yellow, fragrant flowers in early spring.





Myrica pensylvanica * (northern bayberry) does best in Zones 3- 6, and, therefore, can mainly be considered for western and northern Virginia. It grows well in both poor, sandy soils and in heavy, clay soils, but may develop chlorosis in alkaline soils. It can be grown in full sun to half shade. It may get large but can be pruned. At least one male should be planted among female plants for fruit set. Many cultivars that vary in hardiness are available.



Rhus typhina (staghorn sumac) is known as being "hard to kill" and has very showy fall foliage color. Although this species is reported to be susceptible to Verticillium wilt, this disease has not been a problem in Virginia. Female plants have persistent, showy, red fruit stalks. Staghorn sumac tolerates dry soil, but does not do well in poorly drained areas.





***Syringa meyeri* 'Palibin'** (Meyer lilac), a small, dense shrub, is resistant to powdery mildew, which commonly afflicts the common lilac, *Syringa vulgaris*. It needs full sun for maximum flowering, which occurs in April.





***Viburnum x burkwoodii* (burkwood viburnum)** is a large shrub that flowers in April. It has very fragrant flowers, is relatively drought-tolerant, and has fair to good fall color. It is often used for shrub borders. Pictured here is the cultivar 'Mohawk'.



***Viburnum carlesii* (Koreanspice viburnum)** is one of the parents of the burkwood viburnum and has the same traits listed for that hybrid. The popular cultivar 'Compactum' is more dense and compact than the species.



***Viburnum dentatum** (arrowwood viburnum)** is a multi-stemmed, dense, large shrub. It is adapted to a variety of soils and can be grown in sun or partial shade. It has no serious pests or diseases and is valued for its durability and white flowers.



***Viburnum dilatatum* (linden viburnum)** grows best in moist, slightly acid soil. It produces many flowers, but the flowers have an unpleasant odor. The newer cultivars are more compact and less leggy. If grown in Zone 8 (the Virginia Beach area), it should be grown in partial shade and the soil should be kept moist.



Viburnum nudum* (**possumhaw viburnum**) is a native large shrub or small tree with lustrous, dark green leaves and a spreading, rounded crown. Flowers occur in long-stemmed, flat-topped clusters and fruit, which is black at maturity, persists through the winter. Possumhaw viburnum requires moist, well-drained soil. The cultivar 'Winterthur,' pictured here, is prevalent in the trade.



***Viburnum plicatum var. tomentosum* (doublefile viburnum)** is a medium to large shrub, depending on the cultivar. It has a horizontal form and very showy white flowers in May. The berries are also quite striking and remain on the plants for about three weeks in early fall. Some cultivars also have showy fall foliage color.





Viburnum prunifolium* (**blackhaw viburnum**) may be a multistemmed shrub or a small tree. Its growth habit is similar to some of the hawthorns. It does well in dry soil, is adapted to many soil types, can be grown in sun or shade, and has no serious disease or insect pests. It produces showy, white flowers in May.



Problem Shrubs

In contrast to the shrubs described above, those listed below can be considered problem shrubs. These species or cultivars are often sent to the Plant Disease Clinic at Virginia Tech for diagnosis. Avoid using these shrubs in new landscapes if any of the species listed as “problem-free” can be used instead.

***Buxus sempervirens* ‘Suffruticosa’ (English boxwood)** tends to suffer from root diseases, including Phytophthora root rot, English boxwood decline, and nematode feeding. Minimizing cultural and environmental stresses can help prevent these diseases, but control options are limited once symptoms develop. The species ***B. sempervirens* (common box)** is not prone to English boxwood decline and tends to have fewer root problems than ***Buxus sempervirens* ‘Suffruticosa’**. ***B. microphylla* (littleleaf box)** is also relatively problemfree. Hybrids of *B. sempervirens* and *B. microphylla* var. *koreana* are also available.

***Ilex crenata* (Japanese holly)** often suffers from black root rot, a fungal disease, in the landscape. Typical symptoms include sectional dieback of the foliage and blackened roots. Control involves repeated fungicide treatments, which can keep the disease in check but do not rid the soil or roots of the fungus. Certain other hollies, including ***Ilex glabra* (inkberry)**, ***Ilex x meserve*(blue or Meserve holly)** and ***Ilex opaca* (American holly)**, are also susceptible to this disease, although no species is as chronically affected by it as Japanese holly.

***Photinia x fraseri* (redtip)** is susceptible to the fungal disease Entomosporium leaf spot. Symptoms of this disease can be quite severe on plants that are sheared and/or fertilized frequently in the summer. These practices stimulate succulent growth, which is very susceptible to infection.

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