

Think Outside the BOXWOOD:

ALTERNATIVE PLANTS FOR GARDENS AND LANDSCAPES

Bodie Pennisi,
Department of Horticulture

Greg Huber
Center for Urban Agriculture



UNIVERSITY OF GEORGIA
EXTENSION

Boxwood (*Buxus sempervirens*) has been an iconic fixture in the garden for centuries. The fine-textured evergreen foliage and compact growth habit of this shrub make it an excellent choice for borders, hedges, and topiary. The boxwood is used as a bold structural element for defining beds, creating interesting lines and shapes, and establishing the evergreen framework that unifies the landscape.

Gardeners have sculpted boxwood hedges and topiaries into every shape imaginable, making the boxwood a cornerstone of tradition in the formal garden (Figure 1). With the dreaded spread of boxwood blight disease to U.S. gardens, this tradition may begin to take a turn. The disease was identified in Europe a decade ago and was observed in the United States by 2011. In July 2014, boxwood blight disease was confirmed in the Buckhead area of Georgia and additional samples of the disease have since been identified in other parts of the state.



Figure 1. Boxwood plantings are a staple element of many formal gardens. Pictured is a heritage garden at the Atlanta History Center.

The sticky spores of this fungus readily adhere to birds, animals, pruning tools, shoes, clothing, and leaf litter, and can be easily transported and introduced to new locations. All species of boxwood are susceptible to the disease, although certain cultivars of littleleaf boxwood (*Buxus microphylla*) and Korean boxwood (*Buxus sinica*) do not show symptoms of the disease as readily as the dwarf English boxwood (*Buxus sempervirens* ‘Suffruticosa’). Because of this, certain plants have the potential to harbor undetected spores at the nursery and spread the disease into existing landscapes as new plantings. Once infected with the disease, there is no curative treatment. A regular rotation of preventative fungicides may reduce the chances of infection, but can be an expensive and time-consuming solution. Additionally, if the proper rotation of fungicides is not carefully followed, it can lead to the development of resistant strains of the pathogen. All of this translates to bad news for boxwoods.

To combat the spread of this disease, follow a strict regimen of sterilizing pruning equipment and be conscientious of any practices that may transport spores and leaf litter to other sites.

Dead plants should be removed and destroyed. Avoid using replacement groundcovers and shrubs from the boxwood family (Buxaceae) such as Japanese spurge (*Pachysandra terminalis*) and sweetbox (*Sarcococca* sp.), as the disease can persist in the soil and leaf litter and infect new plantings. In addition, avoid the introduction of new (or transplanted) boxwoods into existing plantings. For detailed information and updates concerning boxwood blight disease, visit the UGA Extension publications website at extension.uga.edu/publications.

Unfortunately, until an effective solution for managing this disease is available, it might be best to “think outside the boxwood.” Below is a list of plants to consider as alternatives to boxwood, ranging from conservative look-alikes to distinctly non-traditional options. When selecting plants, choose a species that both meets the goals of the project and suits the specific site conditions.

Alternatives to boxwood:

Boxwood look-alikes with a similar texture and compact form.	Examples: Dwarf Yaupon Holly (<i>Ilex vomitoria</i>) cultivars such as: 'Schillings Dwarf,' 'Nana,' 'Stokes Dwarf' Inkberry Holly (<i>Ilex glabra</i>) cultivars such as 'Compacta,' 'Shamrock' Japanese Holly (<i>Ilex crenata</i>) cultivars such as 'Hoogendorn,' 'Helleri,' 'Convexa,' 'Hetzii,' Little-leaved viburnum (<i>Viburnum obovatum</i>) Dwarf loropetalum (<i>Loropetalum chinense</i>) cultivars such as 'Purple Pixie,' 'Purple Diamond' Dwarf evergreen azaleas (<i>Rhododendron sp.</i>) Yellow rim (<i>Serissa foetida</i>)
Coarse-textured broadleaf evergreens or needle-leaf evergreens that naturally grow in a formal to semi-formal shape.	Examples: Distylium (<i>Distylium x</i>) Carissa holly (<i>Ilex cornuta</i> 'Carissa') Spreading yew (<i>Cephalotaxus harringtonia</i>) Japanese falsecypress (<i>Chamaecyparis pisifera</i>) cultivars such as 'Golden Mop,' 'Filifera Aurea' Hinoki cypress (<i>Chamaecyparis obtusa</i>) cultivars such as 'Gracilis,' 'Nana Gracilis,' 'Rheingold,' 'Golden Globe' Dwarf oriental arborvitae (<i>Platycladus orientalis</i>) cultivars such as 'Aurea Nana,' 'Westmont' Japanese skimmia (<i>Skimmia japonica</i>) Dwarf arborvitae (<i>Thuja sp.</i>) Indian hawthorn (<i>Raphiolepis umbellata</i>, <i>R. delcourii</i>) Dwarf aucuba (<i>Aucuba japonica</i>) Dwarf cryptomeria (<i>Cryptomeria sp.</i>) Dwarf juniper (<i>Juniperus davurica</i>) 'Parsonii' Common Waxmyrtle (<i>Morella cerifera</i>) cultivars such as 'Don's Dwarf,' 'Tom's Dwarf' Dwarf waxmyrtle (<i>Myrica pumila</i>) 'Fairfax' Pittosporum (<i>Pittosporum tobira</i>)* 'Wheeler's Dwarf' Podocarpus (<i>Podocarpus macrophyllus</i>) 'Maki'* Pineapple guava (<i>Acca sellowiana</i>)* Butcher's broom (<i>Ruscus aculeatus</i>)
Evergreen shrubs with fragrant or showy flowers.	Examples: Camellia (<i>Camellia japonica</i>, <i>C. sasanqua</i>) Gardenia (<i>Gardenia jasminoides</i>) Abelia x (<i>Abelia x grandiflora</i>) Winter daphne (<i>Daphne odora</i>) Soft leaf mahonia (<i>Mahonia eurybracteata</i>) 'Soft Caress' Japanese andromeda (<i>Pieris japonica</i>) False holly (<i>Osmanthus heterophyllus</i>) Fragrant tea olive (<i>Osmanthus fragrans</i>) Knockout rose (<i>Rosa x</i> 'Knockout'™)
Non-traditional alternatives with distinct character to replace formal hedges.	Examples: Rosemary (<i>Rosemarinus officinalis</i>) Winter jasmine (<i>Jasminum nudiflorum</i>) Euphorbia 'Blackbird' (<i>Euphorbia x</i>) Alexandrian laurel (<i>Danae racemosa</i>) Drooping leucothoe (<i>Leucothoe axillaris</i>) Holly fern (<i>Cyrtomium falcatum</i>) Yucca 'Tricolor' (<i>Yucca sp.</i>) Bottlebrush (<i>Callistemon sp.</i>)* Saw palmetto (<i>Serenoa sp.</i>) Germander (<i>Teucrium fruticans</i>) Switchgrass (<i>Panicum virgatum</i>) Kuma bamboo (<i>Sasa veitchii</i>) ** Cast iron plant (<i>Aspidistra elatior</i>)**

* Limited to the Coastal Plains of Georgia

** For shaded areas

The following plants are not recommended:

Species	Reason
Japanese spirea (<i>Spiraea japonica</i>)	Category 2 invasive plant
Heavenly bamboo (<i>Nandina domestica</i>)	Category 2 invasive plant
Japanese barberry (<i>Berberis thunbergii</i>)	Category 3 invasive plant
Leatherleaf mahonia (<i>Mahonia japonica</i>)	Category 3 invasive plant
Spreading liriope (<i>Liriope spicata</i>)	Category 3 invasive plant
Clumping liriope (<i>Liriope muscari</i>)	Category 3 invasive plant
Otto-Luyken laurel (<i>Prunus laurocerasus</i> 'Otto-Luyken')	Prone to shot hole fungal disease
Boxleaf euonymus (<i>Euonymus japonicus</i>)	Prone to scale insects
Japanese spurge (<i>Pachysandra terminalis</i>)	Susceptible to boxwood blight
Sweetbox (<i>Sarcococca</i> sp.)	Susceptible to boxwood blight

Examples of plants used as substitutes for boxwood:

Spreading yew
(*Cephalotaxus harringtonia*)



Distylium hybrid
(*Distylium myricoides* x *Distylium racemosum*)



Little-leaved viburnum
(*Viburnum obovatum*)



Dwarf yaupon holly
(*Ilex vomitoria*)



Podocarpus
(*Podocarpus macrophyllus*)



Loropetalum
(*Loropetalum chinense* 'Purple Pixie')



Glossy abelia
(*Abelia x grandiflora* 'Rose Creek')



Butcher's broom
(*Ruscus aculeatus*)



Winter daphne
(*Daphne odora*)



Indian hawthorn
(*Raphiolepis umbellata*)



Holly osmanthus
(*Osmanthus heterophyllus*)



Kuma bamboo
(*Sasa veitchii*)



Soft leaf mahonia
(*Mahonia eurybracteata*
'Soft Caress')



Rosemary
(*Rosmarinus officinalis*)



Alexandrian laurel
(*Danae racemosa*)



Pineapple guava
(*Acca sellowiana*)



Holly fern
(*Cyrtomium falcatum*)



Cast iron plant
(*Aspidistra lurida* 'Milky Way')



Switchgrass
(*Panicum virgatum*)



For detailed information regarding boxwood blight, contact your local UGA Extension county agent at <http://extension.uga.edu/about/county/index.cfm> or call 1-800-ASK-UGA1.

For more information about invasive plants in Georgia visit www.ga-eppc.org.

References

Disease Update: Boxwood Blight in Georgia. Retrieved from <http://plantpath.caes.uga.edu/extension/extension/documents/GA%20Boxwood%20Blight%20Alert%20v2.pdf>

The permalink for this UGA Extension expert resource is fieldreport.caes.uga.edu/publications/C1107/.