Trees and Shrubs for Sustainable Built Environments
HORT 306 Fall 2018

Plant List 11
Small to Medium Evergreen Shrubs

Reading Assignments
In Landscape Plants For Texas And Environs, Third Ed.
– Intro materials on shrubs (p. 682, 807)
– Family descriptions for:
  Berberidaceae (p. 71), Buxaceae (p.72), Caprifoliaceae (p. 74), Celastraceae (p. 75), Cornaceae (p. 77),
  Cupressaceae (p. 78), Ericaceae (p. 81), Lamiaceae (p. 88), Malpighiaceae (p. 88), Myrtaceae (p. 91), Oleaceae (p. 92),
  Rosaceae (p. 99), Rubiaceae (p. 100),
  Scrophulariaceae (p. 102), Zygophyllaceae (p. 107)
– Descriptions for individual species
  See page listings on Plant List 11 Handout
  (also available under lists on course website)

Shades of Green With A bit of Color Between
Small Evergreen Shrubs As Design Elements?

• Facer plants
• Foundation plantings for residences
• Edgings for annual / perennial / groundcover beds
• Knot Garden / Parterres
• Topiary
• Filler / blending larger features
**Small Evergreen Shrubs As Design Elements?**

- Seasonal color
- Container gardens
- Rock gardens
- Specialty designs / logos
- Massing / drifts
- Dual purpose edible / medicinal / herbal

**Small Evergreen Shrubs And Ecosystem Services?**

- Energy savings – green roofs
- Wildlife cover – especially smaller animals
- Wildlife food
- Pollinator support
- Bank covers / soil stabilization
- Restoration plantings
- Dune stabilization
- Naturalizing & transition plantings

**What’s the problem with this shrub?**

*Abelia × grandiflora* (Glossy Abelia)

- Evergreen to semi-evergreen shrub: 4’ - 6’ tall
- Excellent dark glossy green fine-textured foliage
- Responds well to shearing; pollinator friendly
- Small pink/white trumpet-shaped flowers spring - frost
- Evergreen USDA z. 7b-13, semi-evergreen USDA z. 7a-6b, herbaceous perennial USDA z. 6a
**Abelia × grandiflora**

**Glossy Abelia**

- Tolerates variety of soils with drainage
  - Can develop chlorosis on high pH soils
  - Avoid afternoon sun in southern Texas, particularly on variegated cultivars
- Formal or informal hedges, foundation plantings for large structures, seasonal screen, good plant in right setting

**Aucuba japonica**

**Japanese Aucuba**

- Upright small / medium, 3’ - 6’ tall, evergreen shrubs from Asia
  - Very coarse-textured, sparsely branched
  - Bold, large, rubbery, thick leaves
- Species type is seldom encountered, yellow variegated forms are in trade

**Aucuba japonica**

**Japanese Aucuba**

- Handsome red fruit on some female plants
- Needs shade, leaves scorch in full sun
- Best in moist acidic soils, but fairly adaptable
  - Hardy in USDA z. 7 (6b) to 13
  - Primary limitations are leaf scorch, leaf spots, salt exposure and cold damage
  - Good coarse textured shade plant

**Berberis trifoliolata**

**Agarito**

- Medium, 3’ - 5’, evergreen shrubs, USDA z. 7 (?) - 10
  - Leaflets reminiscent of blue-green holly (Ilex) leaves
  - Stiff upright branches, irregular rounded mound
- More heat, drought, & high pH soil tolerant than most Berberis spp.
- Tolerant of cotton root rot
**Berberis trifoliolata** Agarito
- Spiny leaves are maintenance liability
- Grow on well drained soils only
- Yellow spring flowers, fall red fruit
- Accent, barrier plant, naturalizing, xeriscapes, hedges, low screen

**Buxus microphylla** Littleleaf Boxwood
- Dense small broadleaf evergreen shrubs, 2' - 4' tall
- Favorite genera for formal sheared hedges & topiary
- Best on moist acidic organic soils, but takes lesser sites
- Tendency to be short-lived in South, yellows in winter

**Buxus microphylla** var. japonica Japanese Boxwood
- More heat tolerant than species type, best taxon in z. 8+

**Buxus microphylla** var. koreana Korean Boxwood
- More cold hardy than the species type, to USDA z. 5

**Buxus sempervirens** Common Boxwood
- Larger, 4' - 8', than *B. microphylla*, hardy in z. 6 - 8 (9)
- Less winter yellowing of foliage, than *B. microphylla*
- Can reach 15', with age; not particularly heat tolerant
- Also known as English Boxwood, darker foliage
- Typical boxwood used in formal designs in Europe
• Low spreading groundcovers (1' tall) to large erect shrubs (15' tall), deciduous to evergreen
• Variable cold (USDA z. 5 - 7) and heat tolerance (z. 8 - 11)
• Flowers small & mildly attractive; ¼” to ½” diameter orange, red to black fruit may be assets in summer/fall
• Most species are better in sun than shade, most need well drained soils, variable in soil pH and salt tolerance
• Fireblight, spider mites, & root rots are the main problems

Cotoneaster spp.
Cotoneasters

• An evergreen shrub with small gray-green leaves and irregular rounded canopy, USDA z. 7 - 9
• Typically 2’ to 4’ tall in our region, potentially larger
• Mildly interesting pinkish spring flowers & small orange-red fruit
• Valued as a gray-green to silver-green accent
• More drought, heat and fire blight tolerant than most Cotoneasters

Cotoneaster glaucophyllus
Gray Cotoneaster

• Stiffly upright medium (mostly 4’ - 6’ tall) evergreen shrub
• Typically used for yellow / white variegated varieties, but often reverts
• Small-leaved cultivars are substitutes for boxwoods
• Only takes cold to USDA z. 8 (7a), often short-lived & disease / pest plagued; box store plant

Euonymus japonicus
Japanese Euonymus

• Dense twiggy rounded to spreading mostly evergreen to semi-evergreen small or medium, 4’ to 6’ (9’) shrub
• Green to blue-green foliage with terminal spires of yellow flowers

Galphimia glauca
Thyrallis

• Drought tolerant evergreen small shrub, 3’ to 4’ tall
• Green to blue-green foliage with terminal clusters of yellow flowers
• Typical only to USDA z. 9a
**Galphimia glauca**  
Thyrallis  
- Flowers continue through growing season, potential as summer annual  
- Reliably evergreen in z. 9b - 13, as dieback shrub 9a (8b)  
- Use in sunny well drained sites  
- Propagation challenges with cuttings  
- Tendency to legginess if not renewal pruned periodically

**Gardenia jasminoides**  
Gardenia  
- Small to medium, 2’ to 6’ tall, irregularly rounded broad-leaved evergreen shrubs  
- Hardy in USDA z. 8b (8a) - 10  
- Limited cold tolerance, nematodes, whiteflies, mealybugs and a need for neutral to acidic soils are the limiting factors

**Gardenia**

**Jasminum mesnyi**  
Primrose Jasmine  
- A trailing or arching mounded semi-evergreen to evergreen shrub, with 4’ to 7’ long branches  
- Adapts to a wide range of soils & sites in USDA zones 8 - 10  
- Sun to shade, but has less flowers & a more open habit in shade  
- Nice cascading plant for low walls / cutbanks; tolerates severe pruning and is a rapid grower  
- Deer resistant and offers off-season early spring flowers  
- Filler plant with few serious disease or pest limitations

**Gardenia jasminoides**

- Highly fragrant late spring / early summer white flowers are a key asset; unfortunately petals fade to dirty brown  
- Shield from afternoon sun & drying winds in our region; fair drought tolerance

**Jasminum mesnyi**

- ‘Frost Proof’
**Juniperus chinensis var. procumbens**  
(Juniperus procumbens)  
*Japanese Garden Juniper*  
- Popular prostrate Juniper serving similar purposes in the landscape as *J. horizontalis* and *J. conferta*; groundcover or low shrub  
- Stiffer in texture & more irregularly undulate mounding than *J. conferta* & *J. horizontalis*  
- Good heat and drought tolerance once established, best on high pH soils  
- *Phomopsis* blight susceptible  
- Useful in USDA z. 5 (4) to 13  
- A favorite of bonsai enthusiasts

**Juniperus conferta**  
*Shore Juniper*  
- Excellent low, 8”-12”(18”) tall spreading groundcover  
- Softer brighter green than most *Juniperus* spp., some silver colored forms are available

**Juniperus conferta**  
*Shore Juniper*  
- Very salt tolerant, not as adapted to droughty hot sites as some *Juniperus*; wet soil & shade intolerant  
- Limited cold hardiness, USDA zones 6b (6a) - 13

**Juniperus horizontalis**  
*Creeping Juniper*  
- Low broad spreading groundcover, 6” - 2’ tall, may mound in center  
- Plumosa types are purple-brown in winter  
- Green to blue-green summer foliage
**Juniperus horizontalis**
Creeping Juniper

- Hardy in z. 4 (3) - 13
- Many popular cultivars including 'Wiltonii' (Blue Rug) and 'Plumosa' types
- Intolerant of shade or poor drainage
- Watch intermixing cultivars

**Larrea tridentata**
Creosote Bush

- One of the most widespread shrubs in the native flora of West Texas and SW USA, hardy USDA z. 8 (7) to 13
- Irregular broadly mounded small to medium evergreen shrub, aromatic foliage
- Interesting small yellow flowers and fuzzy fruit

**Larrea tridentata**
Creosote Bush

- Extremely drought, heat, and wind tolerant
- Difficult to transplant, use small container grown plants, intolerant of poor drainage
- Will accept shearing

**Leucophyllum frutescens**
Texas Sage

- Small to medium evergreen native Texas shrub
  - Green to superior silver-gray foliage, 4' - 8' tall
  - Tendency to open leggy / scraggly habit if not pruned
- Attractive bell-shaped pink-purple to white flowers
  - Peak bloom in spring, summer flushes after rain events
Leucophyllum frutescens
Texas Sage
- Extreme heat & drought tolerance, takes high pH soils
- Intolerant of poor drainage, avoid high relative humidity regions
- Good xeriscape plant, hardy in USDA zones 8 (7) - 13

Leucophyllum candidum
Violet Silverleaf
- Silver white foliage and violet flowers
- Smaller more compact plant than L. frutescens
- Intolerant of poor drainage & high humidity, use in semi-arid / arid portions of USDA z. 7-13

Mahonia bealei
Leatherleaf Mahonia
- Coarse suckering broad-leaved evergreen shrubs
  - Sparsely branched, foliage is clustered on periphery
  - Variable height, 4'- 8', slow growth, holly-like leaflets
- Terminal panicles of yellow flowers, late winter

Mahonia bealei
Leatherleaf Mahonia
- Bloomy blue-black drupe-like berries in spring
- Best on moist acidic soils in part to medium shade
  - Soil adaptable as long as some moisture is available
  - Needs shade, but useful in USDA zones 7 – 9 (10)
  - Very coarse textured
  - Intolerant of poor drainage, salts, & leaf scorch in sun
**Mahonia aquifolium**
**Oregongrapeholly**

- Broad-leaved evergreen medium / large shrubs
  - More refined in leaf and form than *M. bealei*
  - Beautiful dark glossy green holly-like leaflets, turn bronze in cold weather; useful in USDA z. 5 - 8 (9)

**Malpighia glabra**
**Barbados Cherry**

- A dense twiggy multi-stem fine-textured small to medium, 4’ - 8’ (9’) tall, evergreen shrub in z. 9 (8b)-13
- Small windmill-like white pink to pink flowers followed by small red cherry-like drupes
- Subtropical/tropical native of deep South Texas
- Very heat, moderately drought and salt tolerant

**Myrtus communis**
**Myrtle**

- Irregular upright oval evergreen shrub or small tree, 12’ to 15’ tall; often sheared to smaller size, 5’ to 6’
- Classic myrtle of antiquity
- Fine textured foliage, fragrant white flowers in spring/early summer
- Excellent for screens, hedges, patio planters, pots, background for perennial or color gardens
- Substitute for *Buxus* in Deep South and Southwestern USA
**Myrtus communis**

- Historic / educational / scent gardens
- Compact forms for knot gardens / formal hedges
- Useful in USDA z. 9 (8b) – 13
- A favorite for coastal gardens
- Scale insects are serious problem, spider mites / sooty mold in hot weather
- Intolerant of poorly drained soils

**Nandina domestica**

- Evergreen upright suckering shrubs, 3’ - 6’ (8’) tall
  - Dwarf forms can be only 1’ tall, but often lack flower & fruit
- Finely divided foliage, very interesting appearance
  - Foliage often emerges red, yellow, or bronze; red in cold weather

- Attractive creamy white terminal spring panicles
- Bright red to orange-red berries in fall/winter
  - Profusion & effectiveness of fruit varies
  - Can become invasive in parts of southern USA; full size sterile clones would help
- Tough durable plant in more mesic regions, but is sometimes site sensitive in Texas
- Best with morning sun / afternoon shade, and well drained moist soils
- Useful USDA z. 7(6) - 13

**Potentilla fruiticosa**

- A standard small, 2’ to 3’ tall, fine-textured evergreen shrub of northern & western U.S. gardens
- Used in high elevation West TX and Southwestern U.S. gardens
- Classic yellow or white, pink, orange, to pink-red single flowers
- Effective in USDA zones 2 - 7
- Most any well drained soils, full sun to part shade
**Raphiolepis umbellata**
**Indian Hawthorn**

- Broad-leaved evergreen rounded shrub, 4’ - 6’ (10’)
  - Often sold in trade under name *Raphiolepis indica*
  - Many cultivars may be the hybrid *Raphiolepis x delacouri*
- Dark glossy green foliage with attractive pink or white spring flowers

**Raphiolepis umbellata**
**Indian Hawthorn**

- Full sun/part shade, some drought & pollution tolerance, takes heat, salts, moderate high pH soil
- *Entomosporium* leaf spot can be devastating
- Cold hardiness limited to USDA z. 8b (8a) - 13
- Requires fair drainage & air movement

**Raphiolepis umbellata**
**Indian Hawthorn**

What is wrong with this plant’s foliage?

**Rosa spp.**
**Roses**

- Woody shrubs, herbaceous perennials, semi-climbers
  - Variably cold hardy z. 2 to 7, south to 9 or 10, evergreen to deciduous
- Thorniness (prickles) variable among species & cultivars
- In breeding for flower types fragrance, site adaptability, & disease/pest resistance have been sacrificed; famous, but often over-rated genus
**Rosa spp.**

Roses

- Numerous disease & pest problems
  - Black spot, aphids, powdery mildew, Japanese beetle
  - Rose rosette may become more limiting than the rest
- Shrub / antique roses offer more versatility in use

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**Rosmarinus officinalis**

Rosemary

- Shrub (z. 8-13), subshrub/herbaceous perennial (z. 7)
- Upright 5’ shrub or sprawling / weeping 2’ tall mound
- Dark green, blue-green, or gray-green foliage
  - Pungently aromatic, culinary herb, dried fragrance

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**Is the cure worse than the disease?**

Defoliation from black spot

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**Rosmarinus officinalis**

Rosemary

- Small flowers, light blue/light pink, mildly effective
- Intolerant of wet soils, but moderately drought, heat, and salt tolerant; soil pH adaptable; full sun is best
- Herb garden, hedging (tolerates shearing), rock gardens, xeriscapes, over low walls, containers, bee plant, Mediterranean gardens, & scent gardens
Questions / Comments?

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