

Hollies at a Glance¹

Sydney Park Brown²

Hollies (*Ilex* spp.) are reliable, low-maintenance plants for Florida landscapes. Diverse sizes, forms, and textures exist, ranging from large trees to dwarf shrubs (Figures 1 and 2). Some hollies can be used as informal or formal hedges or as foundation plants, while others make beautiful accent or specimen plants. Many are valued for their colorful berries, which provide food for birds and brighten the fall and winter seasons. Several hollies are native to Florida. Table 1 lists some of the more popular hollies sold in Florida.



Figure 1. The large, weeping form of *Ilex vomitoria* 'Pendula' Credits: Sydney Park Brown, UF/IFAS



Figure 2. The dwarf, compact form of *llex cornuta* 'Rotunda' Credits: Sydney Park Brown, UF/IFAS

Description

Most hollies, including all those listed in Table 1, are evergreen. A few native hollies lose their leaves in winter but are rarely commercially grown and sold in Florida. Hollies are dioecious plants, meaning male and female flowers are located on separate plants. Female plants produce berries (Figure 3); male plants do not. For this reason, nurserymen often propagate only female plants. Male and female plants produce small white blooms in spring. Bees are the primary pollinators, carrying pollen from male hollies 1.5–2 miles, so it is not necessary to have a male holly in the immediate area.

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Figure 3. Holly berries attract birds and add color to the winter landscape.

Credits: Sydney Park Brown, UF/IFAS

General Culture

Hollies generally prefer partial shade, but most grow satisfactorily in full sun. Slightly acidic, well-drained soils are essential for most hollies, although a few, like Dahoon holly (*Ilex cassine*), are native to moist areas and can be planted on wetter sites.

Planting

Container-grown hollies can be planted at any time of the year with proper post-planting care. The planting hole should be 1 foot (30 cm) wider than the root ball and slightly shallower than the height of the root ball. Once planted the site should be watered thoroughly to settle soil around the roots. A 2-3 inch (5-8 cm) depth of organic mulch should be added and maintained to moderate soil temperature, conserve moisture, and help control weeds; however, mulch should not be placed over the root ball. Trees and shrubs that are regularly irrigated through the first growing season after transplanting require from 3 months (USDA Plant Hardiness Zones 9-11) to 6 months (USDA Plant Hardiness Zone 8) to become well established. More detailed planting procedures are provided in Specifications for Planting Trees and Shrubs in the Southeastern U.S. (http://edis.ifas.ufl.edu/ep112).

Watering and Fertilizing

Irrigation is necessary to establish newly planted hollies and to encourage optimal growth. Care should be taken not to waterlog the soil since holly roots require good aeration. Established hollies should be watered as needed during dry periods.

Fertilize newly planted and established hollies in March and September if faster growth is desired or when plants exhibit nutrient deficiencies.

Pruning

Hollies may need occasional light grooming to maintain their form. Major structural pruning may be necessary to maintain a single leader (trunk) on a specimen tree or when training plants for special purposes (Figure 4). Detailed pruning techniques are provided in *Pruning Landscape Trees and Shrubs* (http://edis.ifas.ufl.edu/mg087).



Figure 4. Hollies can be pruned into special forms. Credits: Sydney Park Brown, UF/IFAS

Propagation

Hollies are primarily propagated from tip cuttings in order to produce plants with the same characteristics as the parent plant. Cuttings should be 3–5 inches (7–15 cm) long and treated with a rooting hormone. For optimal rooting, hollies require a humid environment to minimize water loss and tissue desiccation. Growing holly from seed takes longer to produce new plants and results in seedlings that do not have the same characteristics as the mother plant.

Pests

Insects and diseases are not a major problem when hollies are selected, planted, and cared for properly. Poor performance is usually associated with inadequate growing conditions, such as poor soil aeration, drought, improper planting, or lack of fertilization.

Infrequent pests include scale, leaf miner, and spittlebug insects, as well as mites. Many different scale insects feed on hollies by sucking plant juices from leaves and stems. A substance called honeydew is secreted by some scales, and a black, sooty mold fungus grows on the honeydew. Although sooty mold does not harm plants, it is unattractive. Leaf miner larvae feed inside the leaf between the upper and lower surfaces. Blotch or serpentine mines appear on the upper surface of infested leaves. New leaves infested with leaf miners are often stunted and deformed. This pest is seldom severe enough to threaten the health of a holly. Spittlebugs are ¼ inch long, black-brown in color, and oval shaped with two orange bands across their wings. They are most common in north and northwest Florida on *Ilex cassine* and *I. opaca* plants. They feed on young leaves and stems by sucking plant juices. Leaves often are killed and dropped from the plant. Spider mites can be found on the underside of holly leaves, especially during hot, dry weather. Infested leaves turn gray or brown and fall from the plant. More information on pest management is available from your local county UF/IFAS Extension office (http://solutionsforyourlife.com/map/).

Diseases known to attack hollies include stem gall, twig dieback, and root rot. Stem gall, or witches' broom (*Sphaeropsis tumefaciens*), is a usually fatal disease of hollies in Central and South Florida. Stem galls form on twigs and branches, causing the stems to enlarge and initiate an abnormal number of shoots, producing a broom effect (Figure 5). The disease is spread by infected pruning tools

Figure 5. Witches' broom disease (*Sphaeropsis tumefaciens*) Credits: Sydney Park Brown, UF/IFAS

as well as by wind and rain. See *Sphaeropsis Gall of Holly and Other Landscape Ornamental Plants* (http://mrec.ifas.ufl.edu/jos/Sphaeropsis.htm) for more information.

Numerous fungi can cause twig dieback, which starts at twig tips and gradually progresses toward the base. Leaves often wilt and drop from the plant. Root rots are usually associated with overirrigation or hollies planted in poorly drained, wet soils. Poor soil aeration weakens holly roots, allowing fungi to invade and cause considerable damage. Hollies with diseased roots appear weak, and branches, sections, or the whole plant can die. A particular root rot disease known as mushroom root rot can be diagnosed by scraping the bark of large roots or lower trunk tissue. If the area between the bark and the wood shows a white layer of fungal growth, mushroom root rot is involved. Mushroom fruiting bodies may appear in advanced stages of infection. Dead or dying plants affected by mushroom root rot should be removed with as much of the root system as possible, and the soil should be replaced before replanting anything. Fungicides cannot control stem gall, twig dieback, or root rot once these diseases have become established.

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Table 1. Popular hollies for Florida landscapes

Botanical name	Common name	Plant type	Height/spread	Description	FL Region ¹	Native
llex cassine var. cassine	Dahoon holly	Small tree	20'-40'/15'-20'	Pyramidal to oval with open crown; shiny, dark green leaves with spines; red berries; good for wet areas	N, C, S	Yes
'Tensaw'	Tensaw Dahoon holly	Small tree	15′/8′–10′	Pyramidal; dark green; red berries; good for wet areas	N, C, S	Yes
llex cassine var. myrtifolia	Myrtle-leaved holly	Small tree	15′–18′/10′–15′	Dark green leaves without spines; red to yellow berries; good for wet areas	N, C, S	Yes
llex cornuta						
'Burfordii'	Burford holly	Large shrub	12′–20′/8′–10′	Dense form; leathery, dark green leaves; abundant red berries	N, C	No
'Burfordii Nana'	Dwarf Burford holly	Small shrub	5′-8′/5′-8′	Dense, compact; glossy green foliage; red berries	N, C	No
'Carissa'	Carissa holly	Small shrub	3'-4'/4'-6'	Compact mounding; glossy green leaves with thin white margin and spine at tip; no fruit	N, C	No
'Needlepoint'	Needlepoint holly	Large shrub	10′–15′/10′–15′	Dense, rounded; dark green, glossy, slender leaves with spine at tip; red berries	N, C	No
'Rotunda'	Dwarf Chinese holly	Small shrub	3′–5′/3′–5′	Dense, compact; stiff, dark green leaves with many sharp spines; red berries	N, C	No
llex crenata						
'Compacta'	Japanese holly	Small shrub	4'-5'/4'-5'	Dense, rounded; small, medium green leaves; no berries	N, C	No
'Green Luster'	Green Luster holly	Small shrub	3'-5'/8'-10'	Compact shrub; somewhat flat topped; wider than it is tall; dark green leaves; black fruit	N	No
'Helleri'	Heller's holly	Small shrub	3'-6'/5'-8'	Compact mounding; small, dark green leaves without spines; infrequent black berries	N	No
'Sky Pencil'	Sky Pencil holly	Medium shrub	6'-10'/2'-3'	Dense, columnar; dark green leaves; inconspicuous purple fruit	N	No
'Soft Touch'	Soft Touch holly	Small shrub	2'-3'/2'-3'	Dense, rounded; small, soft, glossy green leaves with silver midvein; black berries	N, C	No
llex glabra	Gallberry or inkberry	Medium shrub	6'-10'/8'-10'	Open, vase shaped; long, dark green leaves; black fruits; good for wet areas	N, C, S	Yes
'Compacta'	Compact gallberry	Small shrub	4'-6'/4'-6'	More compact than species; dark green leaves; black berries; good for wet areas	N, C, S	Yes
'Nigra'	Nigra gallberry	Small shrub	4'-5'/2'-4'	Compact; dark green leaves; abundant berries; good for wet areas	N, C, S	Yes
llex krugiana	Krug's holly	Medium tree	20'-40'/12'-15'	Open, irregular crown; long, dark green leaves; berries turn red to black	S	Yes

Botanical name	Common name	Plant type	Height/spread	Description	FL Region ¹	Native
llex opaca	American holly	Medium tree	35′-50′/15′-25′	Dense, pyramidal; long, dark green leaves with spines; red berries; many cultivars exist that are hybrids of <i>l. opaca</i> (see <i>llex</i> x attenuata)	N, C, S	Yes
llex vomitoria	Yaupon holly	Small tree	15′–25′/15′–25′	Upright, vase shaped; grey- green, leathery leaves; red berries on females; suckers; salt tolerant; good for wet sites	N, C	Yes
'Bordeaux'	Bordeaux dwarf yaupon holly	Small shrub	2'-3'/3'-5'	Compact, dense, fine textured; small, green leaves that emerge maroon; no berries	N, C	Yes
'Nana'	Dwarf yaupon holly	Small shrub	3'-5'/3'-6'	Dense, fine textured, rounded; small, dark green leaves emerge with yellow tinge; scarlet berries	N, C, S	Yes
'Pendula'	Weeping yaupon holly	Small tree	15′–30′/6′–12′	Upright, open, weeping habit; small, oval, grey-green leaves; red berries	N, C	Yes
'Pride of Houston'	Pride of Houston holly	Small tree	15′/8′	Denser than species; small, toothed, dark green leaves; red berries	N, C	Yes
'Schellings Dwarf'	Schellings holly or dwarf yaupon holly	Small shrub	4'-7'/6'-10'	Dense, fine textured, rounded; small, dark green leaves; reddish new growth; no berries; also sold as 'Schillings'	N, C, S	Yes
'Taylor's Rudolph'	Taylor's Rudolph dwarf yaupon	Small shrub	3'-4'/4'-5'	Dense, fine textured, rounded; small green leaves emerge with purplish tinge; red berries	N, C, S	Yes
<i>llex</i> hybrids: Hollies de	erived from crosse	s between two	or more species of	hollies		
llex x attenuata				Hybrids of <i>I. opaca</i> and other species		
'Eagleston'	Eagleston holly	Small tree	18'-25'/6'-10'	Pyramidal, dense; medium green leaves with soft spines; red berries	N, C	Yes
'East Palatka'	East Palatka holly	Medium tree	30′-45′/10′-15′	Tight pyramidal shape; rounded, dull green leaves with spine at tip; bright red berries; insect and disease resistant	N, C	Yes
'Foster #2'	Foster's holly	Small tree	15'-25'/8'-10'	Pyramidal, dense, very dark green leaves with spines; abundant red berries	N, C	Yes
'Savannah'	Savannah holly	Medium tree	40'-50'/15'-25'	Narrow pyramidal to columnar form; medium, dull green; dark red berries	N, C	Yes
llex x 'Conaf'	Oak Leaf™ holly	Large shrub	14'/8'	Pyramidal, dense; emerald-green leaves emerge bronze; oak leaf shaped; fast growing; red berries	N, C	No
llex x 'Mary Nell'	Mary Nell holly	Small tree	10'-20'/10'-15'	Dense, pyramidal; glossy, olive- green leaves with many short spines; abundant red berries	N, C	No
<i>llex</i> x 'Nellie R. Stevens'	Nellie R. Stevens holly	Small tree	20′-30′/10′-12′	Pyramidal, dense; glossy, dark green leaves; red berries	N, C	No