Hollies

for the Home Garden



University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

MP310

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# **Hollies** for the Home Garden

Hollies (*llex*) are a major component of Arkansas landscapes, and deservedly so. They include more than 400 species and hundreds of selections. Due to the wide variation in plant size (2' to 40') and habit (mounded to conical), they are useful as foundation plants, mass plantings, hedges or as a specimen. Hollies can be broken into broad groups: evergreen or deciduous forms, and those with red or black fruits. The forms that tend to be most popular with homeowners are broadleaf evergreen plants with red fruits.

The majority of hollies are classified as dioecious (di-E-shush). In simple terms, this means male and female flowers are born on separate plants. This is an important consideration since most people prefer female selections because they bear fruit. In Arkansas, it is unlikely that you need to provide a male pollinator since so many species of holly are already present in the landscape.

## Culture

In general, hollies are easy to maintain. Most hollies perform well in full sun or partial shade and grow well in the acid soils commonly found in Arkansas. Iron chlorosis (yellowing of the leaves) may occur on deciduous hollies (*I. decidua*, *I. verticillata*) in the northern tier of counties where the underlying limestone raises the soil pH to near or above 7. In general, the Chinese (*I. cornuta*), Japanese (I. crenata) and American (I. opaca) hollies do not perform well in heavy, poorly drained soils. These types of soils are frequently found in landscapes associated with new construction. The native Yaupon holly (*I. vomitoria*), which can be found growing in swampy areas across the Southeast, is somewhat more adaptable to soil type. In general, any of the evergreen forms of holly should be well watered going into the winter to

minimize winter injury. Cold hardiness may be a problem on some evergreen hollies, especially Chinese hollies (*I. cornuta*) growing in the northern tier of counties (zone 6) in Arkansas.

## Pruning

As a collective group, hollies rarely require pruning. The primary reason for pruning a holly is size control. Rather than pruning a plant back to a specific size, it makes more sense to give careful thought to the size and shape of the holly variety before planting. Chinese holly (*I. cornuta*) is notorious for its resilience to severe pruning. Large Chinese holly plants can be cut nearly to the ground and yet likely re-grow from stumps. Significant pruning of any holly is best performed in early spring.

## Pest and Disease Problems

Hollies as a general rule have very few serious pest or disease problems. Scale insects are the most common pest. If left untreated, severe scale infestations will generally cause an overall decline in the health of holly plants. Spider mites are frequently associated with Japanese holly (*I. crenata*) in hot weather. Symptom of spider mite injury would be a light brownish tinge to the normally dark green leaves. Upon closer inspection, the leaf will appear speckled and some webbing may be visible. Good control can be achieved by applying a miticide. Leaf miner, while sometimes observed on American holly (*I. opaca*), is more of an aesthetic pest that is rarely treated.

While a variety of diseases (e.g., stem canker, leaf spot, root rot) have been reported on hollies, these tend to be uncommon if the plant is grown in a suitable environment.

## TABLE 1. Examples of Hollies for Specific Landscape Situations in Arkansas

Low, mounded	Conical, pyramidal	Specimen
'Carissa' Chinese Holly – 3-4' tall x 3-4' wide	Burford Chinese Holly – 20-25' tall x 10-15' wide	Weeping Yaupon Holly – weeping
'Dwarf Burford' Holly – 5' tall x 6' wide	American Holly – 30' tall x 12' wide	'Sky Pencil' Japanese Holly – narrow columnar (10' tall x 2.5')
'Rotunda' Chinese Holly – 3-4' tall x 4-5' wide	Foster Holly – 20-25′ tall x 6-8′ wide	'Will Fleming' Yaupon Holly – narrow columnar
Compact Japanese Holly – 5' tall x 5' wide	'East Palatka' Holly – 20-25' tall x 8-10' wide	'O. Spring' Chinese Holly – yellow variegation 20' tall x 20' wide
'Helleri' Japanese Holly – 4' tall x 6' wide	'Emily Bruner' Holly – 25' tall x 15' wide	
'Soft Touch' Japanese Holly – 2.5' tall x 3.5' wide	'Savannah' Holly – 20-25' tall x 8-10' wide	
Bordeaux™ Yaupon Holly – 4' tall x 5' wide	'Martha Berry' Holly – 20' tall x 10' wide	
Dwarf Yaupon Holly – 5' tall x 6' wide	'Mary Nell' Holly – 20' tall x 12' wide	
'Schillings' Yaupon Holly – 4' tall x 5' wide	'Nellie R. Stevens' Holly – 20' tall x 12' wide	

## **Evergreen Hollies**

## **Chinese Holly** Ilex cornuta

The Chinese hollies, and their many cultivars, are widely used in landscapes in central and south Arkansas. As a group, they tend to have coarse-textured dark green leaves, be very heat tolerant and very forgiving to severe renewal pruning. Many cultivars have 5 to 6 very pronounced spines on the edge of the leaves. As the winter of 2010-11 demonstrated, Chinese holly is susceptible to winter damage in northern counties (zone 6) of Arkansas. Fruits, when present, are red.



#### 'Burfordii'

Historically, the Burford holly has been one of the most popular Chinese hollies used for hedge or screen purposes. The leaves typically have 1-3 spines. Fruit set is heavy and will occur



without pollination (parthenocarpy). The plant was discovered in the early 1900s in West View Cemetery, Atlanta, Georgia, and is named after the superintendent, Thomas Burford.

Figure 1. 'Burfordii'

### 'Carissa'

A unique, globe-shaped plant that lacks the formidable spines on the margin of the leaf common to most Chinese hollies. The absence of spines along the leaf edge and the plant shape make this an excellent choice along walks or as a foundation plant. Although a female selection, the amount of fruit production is variable.



Figure 2. 'Carissa'

#### 'Dwarf Burford'

The dwarf Burford is nearly a globe-shaped plant. Leaves, which are dark green, are almost puckered in appearance with a single spine at the leaf tip. Fruit production is moderate.



Figure 3. 'Dwarf Burford'

### 'O. Spring'

This male seedling was found by Otto Spring, a nurseryman in Oklahoma. It is unique in that the margin of the leaves has an irregular band of yellow on what are otherwise dark green, lustrous leaves.



Figure 4. 'O. Spring'

#### **Chinese Holly**

#### 'Rotunda'

Similar in plant habit to 'Carissa'; however, the leaves of 'Rotunda' are dramatically different. Leaves on 'Rotunda' have, on average, 7 pronounced spines on the leaf margin. This plant should be avoided in areas where children play and should not be located near sidewalks. Similar to 'Carissa', although a female selection, the fruit production is variable.



Figure 5. 'Rotunda'

## Japanese Holly Ilex crenata

The Japanese hollies are a stark textural contrast to the Chinese hollies. The small, elliptic leaves are more similar to those of the Yaupon holly (*I. vomitoria*). There are literally hundreds of selections, most of which are well suited as mass plantings or as foundation plants. In general, Japanese holly is best suited in the northern counties of Arkansas (zone 6) and often struggles in the summer in central and south Arkansas (zones 7 and 8). Fruits, when present, are black.

#### 'Compacta'

'Compacta' is likely a catch-all name for a group of compact, globe-shaped plants.



Figure 6. 'Compacta'

#### Japanese Holly

#### 'Helleri'

A dwarf, mounded form with a distinctive, layered habit.



Figure 7. 'Helleri'

#### 'Sky Pencil'

'Sky Pencil' is a very distinctive, upright columnar-shaped plant. Useful in narrow spaces or as a low, narrow hedge. 'Sky Pencil' was introduced by the U.S. National Arboretum in 1992. The plant was discovered in the wild on Mount Daisen, near Honshu, Japan.



Figure 8. 'Sky Pencil'

#### 'Soft Touch'

'Soft Touch' is commonly sold in Arkansas and appears to have more heat tolerance than most Japanese hollies. The branches are not as stiff ('soft touch') as other selections. Female.



Figure 9. 'Soft Touch'

## Inkberry Holly Ilex glabra

Used less frequently in Arkansas when compared to the selections of Japanese and Chinese holly. Similar to Japanese holly, the fruits are black. In general, the plant habit is an upright oval. The most common complaint about this evergreen holly is the fact that the lower leaves tend to drop, leaving bare branches at the base of the plant. A number of selections (e.g., 'Nigra') have better leaf retention at the base. This holly should be used more in Arkansas as a foundation plant or in masses.



Figure 10. Inkberry Holly



### American Holly Ilex opaca

American holly is another holly native to the U.S. (*I. vomitoria*; *I. glabra*) and is often found in woodland settings of the Southeast. This holly is used less often in modern landscapes mainly due to the slower growth when compared to many of the newer holly hybrids. Avoid seed-grown American holly because there are too many excellent cultivars (e.g., 'Carolina #2', 'Jersey Princess', 'Old Heavy Berry') in the trade with superior fruit and plant habit characteristics.



Figure 11. American Holly

## Yaupon Holly Ilex vomitoria

This small-leaved holly is native to the southeastern U.S., extending into the southernmost counties of Arkansas. At first glance the Yaupon holly looks very similar to the Japanese holly. The two are easily separated by leaf and fruit characteristics. The most obvious difference is the fruit color. Fruits on Yaupon are red while those on the Japanese holly are black. New leaves on Yaupon tend to have a purple tinge to the green leaves, whereas the new leaves on Japanese holly are typically a medium green. Outermost stems on the Yaupon holly are distinctly gray in contrast to the yellow-green color of young stems on the Japanese holly. In general, Yaupon holly performs better in central and south Arkansas (zones 7 and 8) than Japanese holly.



Figure 12. Yaupon Holly

#### Bordeaux™

Bordeaux<sup>TM</sup> is a fairly distinctive selection with the new leaves having a burgundy tinge and the overall leaf color in the winter being a darker green-burgundy than most Yaupon cultivars. This is a branch sport of 'Schillings'. The primary difference between the two is the burgundy hues found in Bordeaux<sup>TM</sup>. Commonly used as a foundation plant or in masses. Male.



Figure 13. Bordeaux™

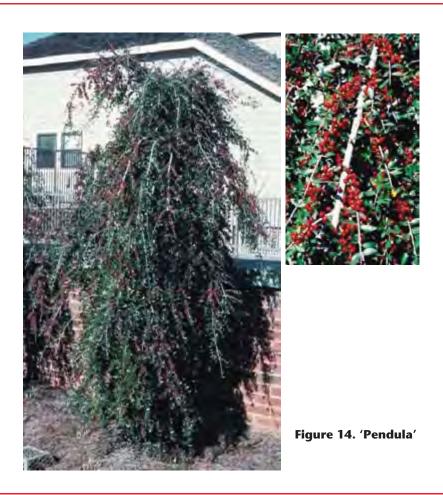
#### 'Nana'

Likely a commonly used name in the trade for a collective group of dwarf selections.

#### Yaupon Holly

#### 'Pendula'

Similar to the comment made about 'Nana', 'Pendula' is as an umbrella name for the many weeping forms sold in the trade that can be male or female plants. The clear majority tend to be female selections. A very popular specimen plant used for a dramatic effect in the landscape. Has cascading branches covered in beautiful red fruits in the fall and winter.



### 'Schillings' ('Stokes Dwarf')

'Schillings' is a common dwarf selection sold in the trade. Very similar to Bordeaux<sup>™</sup> except in leaf color. Selection from Sam Stokes Nursery in LeCompte, Louisiana. Synonymous with 'Stokes Dwarf'. Male.



Figure 15. 'Schillings' ('Stokes Dwarf')

#### 'Will Fleming'

'Will Fleming' has a distinctly narrow, upright form. The plant tends to splay as it ages, which may cause some maintenance issues. Male?

'Scarlet's Peak' is another columnar (20' x 3') selection.



#### Figure 16. 'Will Fleming'

## **Evergreen Holly Hybrids**

#### **Foster Holly** – *Ilex x attenuata 'Foster #2' (I. cassine x I. opaca)*

Foster Holly is likely the most popular narrow, upright holly sold in the retail trade in Arkansas. The upright conical habit and small, attractive deep-green foliage makes this a good choice as a hedge or screen plant or at the corner of a building. Fruit retention is excellent. 'Foster' holly was selected by nurseryman E. E. Foster in Bessemer, Alabama, in the 1940s. It is reported to be an open-pollinated cross between dahoon holly (*I. cassine*) and American holly (*I. opaca*). From hundreds of seedlings, Mr. Foster selected five for further evaluation. Seedling #2 was identified as the most superior and therefore introduced to the nursery trade. Female.

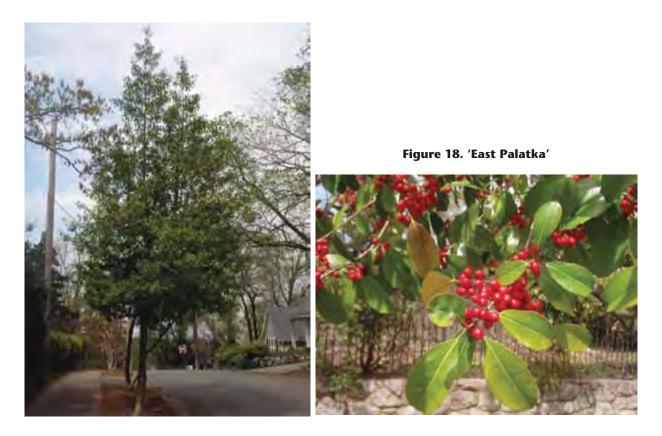




Figure 17. 'Foster #2'

#### East Palatka – Ilex x attenuata 'East Palatka'

'East Palatka' is a very popular cultivar in the trade. While pyramidal in shape, it is not as tight as 'Foster #2'. Less cold hardy than 'Foster #2' and 'Savannah'. Female.



#### **Savannah** – *Ilex x attenuata 'Savannah'*

'Savannah' is a very common form in the Southeast. Leaves have more spines in comparison to 'East Palatka'. Fruit production is excellent. The parent plant was found in Savannah, Georgia.

Figure 19. 'Savannah'

#### **Evergreen Holly Hybrids**

#### **Emily Bruner** – Ilex x 'Emily Bruner' (I. cornuta 'Burford' x I. latifolia)

This is a fairly broad, upright holly. The shiny, dark green, broad, ovate leaves have a margin dotted with 12-14 evenly spaced spines. This holly was introduced by the legendary nurseryman, Don Shadow, of Winchester, Tennessee. A good male pollinator would be 'James Swan'.



Figure 20. 'Emily Bruner'

Koehne Holly – Ilex x koehneana (I. aquifolium x I. latifolia) 'Martha Berry'

There are a number of selections from this same parentage. The University of Arkansas evaluated 'Martha Berry' in a statewide trial. Performance statewide was very good. After 5 years, average plant size was 82" tall by 61" wide. 'Hohman', although not tested, would also be a good selection.



Figure 21. 'Martha Berry'

#### Mary Nell Holly – Ilex x 'Mary Nell'

'Mary Nell' is another excellent choice as a hedge or screen plant. Compared to 'Emily Bruner', the leaves are not as broad (ovate) and the color is more of a medium green (not as dark). This selection was named after Dr. J. C. McDaniel's (retired professor University of Illinois) wife, Mary Nell.



**Nellie R. Stevens –** *Ilex x 'Nellie R. Stevens' (I. cornuta x I. aquifolium)* 

Introduced to the trade in the late 1950s, 'Nellie R. Stevens' is commonly sold as a hedge or screen plant in Arkansas. Fruit production is very consistent. This cultivar is one of several selected by Ms. Stevens out of seed she obtained from the U.S. National Arboretum around 1900.



Figure 23. 'Nellie R. Stevens'

## **Other Evergreen Holly Hybrid Options**

In addition to the hollies described so far, there are many other excellent holly selections sold in Arkansas. One of these is the Dixie series, a series of hybrid hollies from Plant Development Services (PDSI) in Loxley, Alabama. Specific cultivars in this series include Dixie Dream<sup>™</sup> and Dixie Flame<sup>™</sup>. Dixie Dream<sup>™</sup> was evaluated by the University of Arkansas Plant Evaluation Program from 1999 to 2003. Average plant size statewide was 8.5' tall by 5.5' wide. Plants have an upright pyramidal shape without pruning and a finer



texture than what is seen on Foster Holly. The lipstick red, pea-sized fruits are distributed evenly on this selection.

Another series of hybrid hollies that is sold in Arkansas is the Red Hollies. Again, the University of Arkansas evaluated some of these. Oakleaf<sup>TM</sup> produced a very tight pyramidal shape (9.5' tall x 6' wide after 5 years) with no pruning. Although listed as a female, our plants never developed fruit. Oakleaf<sup>TM</sup> has since been replaced by an even tighter habit plant, Oakland<sup>TM</sup>. Little Red<sup>TM</sup>, in the same series, is a more globe-shaped plant (7.5' tall x 7.5' wide after 5 years). Fruit set was excellent on this selection. Based on results from the trial, Little Red<sup>TM</sup> may be better adapted to central and south Arkansas than to zone 6 areas.

Particularly in northern Arkansas, gardeners may find the Blue, or Meserve Hollies (*I. x meserveae*), for sale. Kathleen Meserve was a backyard gardener on Long Island who crossed prostrate holly (*I. rugosa*) with English holly (*I. aquifolium*) to develop a magnificent series of useful hollies, especially for more Northern climates. Names in this series include 'Blue Angel', 'Blue Boy', 'Blue Girl', 'Blue Prince' and 'Blue Princess'. In general, these perform better in zone 6 or colder.

Figure 24. *Ilex* x Oakland<sup>™</sup>



Figure 25. Ilex x meserveae 'Blue Stallion'



Figure 26. *Ilex x* Little Red<sup>™</sup>

## **Deciduous Hollies**

## Possumhaw

## Ilex decidua

Possumhaw is one of two deciduous (loses leaves in the winter) hollies native to Arkansas. It would likely be difficult for a home gardener to tell the difference between Possumhaw and Winterberry Holly (*I. verticillata*) as the differences, while real, are subtle. Possumhaw is either a large multi-stemmed shrub or small tree with a height of 20' and spread of 15'. It is reported to be more tolerant of alkaline soils than Winterberry Holly. 'Warren's Red' is an excellent selection.



Figure 27. Possumhaw

## Winterberry Holly Ilex verticillata

The Winterberry Holly is generally smaller in size (8' tall x 10' wide) than Possumhaw. There are many more (30 to 40) selections of Winterberry Holly than Possumhaw. Fruits on either of these deciduous hollies is exceptional and adds a great deal to a winter landscape. There are many cultivars including 'Afterglow', 'Cacapon', 'La Have', 'Red Sprite' and Winter Red<sup>R</sup>.



Figure 28. 'Afterglow'

## **Deciduous Holly Hybrids**

A number of hybrids can be found in the trade. These hybrids tend to grow faster than pure Winterberry Holly, and the fruits will likely ripen earlier.

#### Ilex x 'Sparkleberry'



Figure 29. 'Sparkleberry'

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