

TYLER ARBORETUM

515 Painter Road, Media, Pennsylvania USDA Hardiness Zone 6

The 2014 winter was quite a contrast to our previous mild winter and its harsh effects showed on our holly collection. The Philadelphia area experienced the second snowiest winter on record with over 65 inches (1.7 m) of snow. In January, we became acquainted with the term “polar vortex” when our temperatures dipped to the lowest recorded in 20 years, 4 °F (−15.6 °C). Still at the end of March, we received a few more inches of snow with temperatures down in the mid-20’s. In mid-April, temperatures shot up for two days in the 80 °F (26.7 °C) range, followed by a freeze warning the night of April 15. The summer weather made up for the extreme winter weather. Our summer was described as a New England summer: one without the intense heat and humidity that we are familiar in the Philadelphia region. We ended the year with a warm December of rain rather than snow.

After the harsh winter, many of our evergreen hollies suffered significant foliar damage. The *I. opaca* fared best, with minimal leaf scorch. The less hardy *I. aquifolium*, *I. cornuta*, *I. × koehneana*, and *I. × altaclerensis* sustained the most leaf burn and some defoliation, especially on their exposed sides. Cultivars that were exceptions to this were: *I. × altaclerensis* ‘James G. Esson’; *I. cornuta* ‘Dwarf Burford’; *I. cornuta* ‘Slack’; and *I.* ‘John T. Morris’. These hollies tended to be in more protected sites. *I.* ‘Venus’ probably sustained the most foliar damage in the collection due to its exposed situation. By May, all those hollies with foliar damage from winter had new growth with no noticeable branch dieback.

Overall, it was not a good fruiting year for those hollies that that suffered the most winter damage. These hollies bear fruit on old wood and flower in early spring, when we still were experiencing freezing temperatures, so flower bud damage may have occurred at either time. Stronger fruiting was seen on the hardier *I. opaca* and the deciduous holly cultivars *I.* ‘Sparkleberry’ (zone 5a) and *I. verticillata* ‘Winter Gold’(zone 4), all later bloomers that produce fruit on new growth. *I. pedunculosa*, which also produces fruit on new wood, did not perform well this year. Other good fruiting was on *I. cornuta* ‘Slack’, and *I. × koehneana* ‘Lassie’. The wider mounding hollies without strong leaders, such as the *meserveae* cultivars, looked terribly misshapen after heavy ice and snow loads, but regained their shape by summer.

A silver lining from the winter storm damage was the exposure of *I. × attenuata* ‘Sunny Foster’ to more sun as the result of an overhead hemlock falling and taking out another shade tree with it. This specimen had not shown a hint of yellow for at least the last five years. We were welcomed this spring with bright yellow highlights on the tips of its leaves and it makes a beautiful bright spot next to an entry gate from the parking lot.

Our collection contains eight of the Holly of the Year cultivars. Many of these are among the best specimens in our collection.

2003: *I. opaca* ‘Satyr Hill’: Excellent shape with single leader, particularly good medium-green foliage. Foliage did well over winter, good fruit set.

2005: *I. × koehneana* ‘Lassie’: This specimen is in a protected site. Foliage did well, and good fruit set in the fall.

2006: *I. × attenuata* ‘Sunny Foster’: In the spring, leaves showed good bright yellow coloring.

2007: *I. aquifolium* ‘Lewis’: Excellent pyramidal form, with dense branching to the ground

2010: *I. verticillata* ‘Red Sprite’: Moderate fruiting this year

2011: *I. (cornuta × aquifolium)* ‘Nellie R. Stevens’: Specimen is shaded and habit is fair with good foliage.

2013: *I. pedunculosa*: Yellowing of leaves in winter, sparse fruiting

2014: *I. × meserveae* ‘Mesgol’ ‘Golden Girl’™: We have three specimens, accessioned in 1993. Two have good compact mounded form. The third, which is in a more exposed area, has sparser foliage and is leggier. None fruited well this past fall.

In 2014, we added 46 new holly plants primarily as mass plantings around the newly constructed Scenic Loop in our Pinetum. Several retention ponds catch runoff from the new path and create moist areas nearby perfect for *I. verticillata*. Masses of *I. verticillata* ‘Golden Verboom’

(15 female and 2 male), 'Stoplight' (13 plants plus two 'Jim Dandy') and 'Winter Gold' (9 plants plus one 'Southern Gentleman') were planted near the edge of the ponds to get the reflection of the fruit in the water during late fall and early winter. These are planted alongside other winter interest plants such as bloodtwig dogwood (*Cornus sanguinea*), and early witch-hazel (*Hamamelis*) cultivars. In addition, we planted an *I. opaca* 'Satyr Hill' in our Rhododendron Garden, away from the Holly Collection area and three *I. glabra* 'Shamrock' to provide a screen for an air pump near our main pond. None of these were new taxa for the collection. Four *Ilex* died in 2014, all in our polyhouse: *I. 'Rutzan' Red Beauty*[™], *I. glabra* 'Shamrock' and *I. 'Winter Bounty'*. Presently, our collection totals 568 *Ilex* accessions and 147 *Ilex* taxa. Note: the decrease in number of accessions from 589 last year represents mostly record adjustments as we consolidate individually accessioned *I. verticillata* plants into masses.

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