Superior Selections of Ilex

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Among the 1000 plus selections of American holly (*Ilex opaca*) given cultivar names, four recent introductions from the Woody Ornamentals Breeding Program at Rutgers University are worthy of mention. All have excellent foliage characteristics, high vigor and are fully winter hardy in U.S.D.A. Plant Hardiness Zone 6a (0.to-10F).

Ilex opaca Selections.

- 'Jersey Princess'. Selected from the progeny of an unnamed female × 'Jersey Knight', this red-fruited plant was introduced in 1976 as the Bicentennial Holly. The plants develop a conical form of moderate width and exhibit the darkest, glossy green leaves of any cultivar of *I. opaca* that this holly hybridizer has ever seen.
- 'Dan Fenton'. A seedling among the progeny of a controlled cross of 'Maurice River' × an unnamed male, this red-fruited plant was selected for its excellent spiny, dark green leaves (almost squarish). 'Dan Fenton' was released at the 40th Anniversary meeting of the Holly Society of America, Inc. and named in honor of the now deceased Daniel G. Fenton, one of the greatest promoters ever of the value and uses of plants of *I. opaca*. Broadly conical in habit, the original seedling was 20 ft tall by 15 ft wide at 26 years. Plants of 'Dan Fenton' make up well in container production with a minimum of pruning and staking.
- 'Jersey Delight'. This cultivar originated as a pistillate selection among the progeny of a controlled cross of 'Old Heavyberry' × 'Isaiah'. The plants develop a moderately narrow and compact, conical habit. The foliage is similar to that of 'Old Heavyberry' as the shiny leaves are dark green with deeply impressed veins above. The annual display of reddish orange fruit is very showy.
- 'Jersey Knight'. Selected from the wild on the estate of the late Judge Thomas Brown, Locust, New Jersey by members of the Holly Research Committee of New Jersey, plants were propagated and placed under test at Rutgers University. After observing these plants for 6 years, I named this cultivar and introduced it to commerce in 1965. Thirty-two years later, I believe it safe to say that 'Jersey Knight' has received widespread acceptance as one of the best staminate cultivars of *I. opaca* for use in states of the Northeast, Mid Atlantic, and Midwest. The plants are dense and self-compacting, exhibit excellent dark green, semiglossy foliage and constitute an attractive pollinator for pistillate plants. Plants of 'Jersey Knight' are fully hardy in USDA Plant Hardiness Zone 5b (-10 to -15F.) and possibly colder areas if care is taken the first few years to get the plants well established.

Deciduous Holly Selections Introduced from my Breeding Program.

My interest in deciduous hollies began my first year at Rutgers University (1960) when a cross of our native *I. verticillata* onto a plant of its Asiatic counterpart, *I. serrata*, yielded a large population of true F1 interspecific hybrids in early 1961. The two pistillate cultivars listed below were the first reported hybrids of these two species. These hybrids are smaller and more densely branched and foliaged close to the ground, and more refined in appearance with smaller leaves and fruit than plants of *I. verticillata*, which tend to be more coarsely textured and open at the base.

- *Ilex* 'Harvest Red'. Plants of this hybrid are very broadly vase shaped, being wider than tall, with dark green, glossy leaves. The abundant fruit become vivid red by September 1st in central New Jersey. The first heavy freeze (October 15-20) "knocks" the leaves off but the brilliant display of fruit remains into February, unless sub-zero temperatures (-0F.) occur before that. 'Harvest Red' received the Pennsylvania Horticultural Society's Gold Medal Plant Award in 1991.
- *Ilex* 'Autumn Glow'. Plants of 'Autumn Glow' are more erect and less spreading in habit than are plants of 'Harvest Red' but the dense branches and leaves still clothe the multistemmed nature of the plants. The leaves of this hybrid are lighter green, and the fruit on the South side bleach earlier, than is the case with 'Harvest Red'. Still, the plants provide 6 weeks of color with foliage and fruit plus the brilliant fruit display for another 10 to 11 weeks.
- Ilex 'Raritan Chief'. This staminate hybrid was selected from the progeny of a cross of a I. serrata/I. verticillata F1 hybrid (staminate) onto an unrelated plant of I. verticillata. The original plant of 'Raritan Chief' was selected for its very low, dense, compact, mounded habit and attractive summer foliage. Its unusually long flowering period is a distinct asset in its role as a pollinator as plants of both parental species and hybrids thereof flower at widely different times. The absence of staminate plants in flower at the appropriate time accounts for many of the reports, or complaints, one hears about poor fruit set with plants of various cultivars of these species and hybrids.

Other Deciduous Holly Selections

- Ilex verticillata 'Red Sprite'. One cultivar of our native I. verticillata that has been around for many years and has become very popular is 'Red Sprite' (previously sold as 'Nana' for many years). This cultivar originated as a chance seedling discovered by P. A. Siebaldi in the wild near Hampden Nursery, Hampden, Massachusetts and was named and registered as 'Red Sprite' in 1980 by P. A. Siebaldi (Galle,1997). Plants of this cultivar are dwarf, a mature plant being about 4 ft tall. The plants produce abundant bright red fruit that become exceptionally large on plants that are heavily fertilized.
- *Ilex verticillata* 'Winter Red' and 'Winter Gold'. Widespread interest in deciduous hollies began when the late Robert C. Simpson

of Simpson's Nursery Co., Vincennes, Indiana named, patented and introduced a pistillate selection in 1977 as 'Winter Red' (PP 4143; reissued PP 22912 in 1979). Plants of this cultivar are erect and multi-stemmed with a rounded shape (9 ft tall × 8 ft wide), flower at a young age and fruit abundantly. The foliage is dark green and the large fruit are vivid red, normally retaining good color unusually long. Mr. Simpson actively promoted 'Winter Red' and this cultivar was soon in heavy demand.

Mr. Simpson found a budsport on a plant of 'Winter Red' about 1983, the sport branch bearing lighter green leaves and yellow fruit with a tinge of pink. Plants propagated from this sport were similar in other horticultural characteristics to 'Winter Red' and this new clone was introduced as 'Winter Gold' in 1988.

Simpson's work in selecting, introducing and promoting deciduous hollies moved this group of plants from a level of relative obscurity to a position of prominence in the nursery industry.

■ Ilex decidua 'Council Fire'. J. Bon Hartline of Anna, Illinois has made many selections of superior seedlings of our native I. decidua. His favorite is 'Council Fire', the original plant of which he selected in the wild and moved to his nursery. Plants of 'Council Fire' are small to medium size for plants of I. decidua, the original seedling being multistemmed and well branched, but of compact habit, attaining a size of 18 ft tall by 10 ft wide after 25 years. The leaves are dark green and rather narrow, and drop early in the fall to provide a good display of fruit. The fruit is a bright, dark red but smaller than typical for the species but this is of no consequence as the plants fruit heavily. Unlike I. serrata and I. verticillata, plants of I. decidua generally retain the fruit on the plant in good color throughout the winter.

I maintained a replicated performance trial of many cultivars of *I. decidua*, along with other deciduous hollies, at the New Jersey Agricultural Experiment Station in central New Jersey for at least 20 years but I do not know of one nurseryman in New Jersey who showed any interest in plants of *I. decidua*.

Ilex crenata Selections.

Two relatively new staminate cultivars of *I. crenata*, a species of widespread interest, have been introduced from Rutgers University and are gaining in popularity and availability. They are 'Beehive' and 'Jersey Pinnacle'.

- 'Beehive'. Selected from a population of 21,000 seedlings resulting from a cross of 'Convexa' × 'Stokes'. Under test for 23 years prior to introduction, plants of 'Beehive' are dense and self-compacting, with attractive tiny, dark green leaves. The plants are much more winter hardy than plants of 'Stokes' and typically grow 3 ft tall by 4 ft wide in 12 to 14 years, and are fully winter hardy in Zone 6a.
- 'Jersey Pinnacle'. This cultivar originated as a staminate selection from a controlled cross of 'Green Lustre' × 'John Nosal'. The original seedling was selected for its upright pyramidal habit and

dark green leaves that are highly resistant to winter scorch. Plants become uniformly wide (columnar) with age and are reliably winter hardy in Zone 6a.

Other Hybrids.

■ Ilex 'Rock Garden'. One final Ilex selection I recommend for those who like truly dwarf plants is Ilex 'Rock Garden'. This selection resulted from a cross of I. aquipernyi × (I. integra × I. pernyi 'Accent'). An 18 year plant in a 7-gal container has attained a height of 10 inches with a spread of 12 to 14 inches and exhibits a good display of rather large, bright red fruit. This is the first good dwarf Ilex with a holly-type leaf for use in rock gardens.

LITERATURE CITED

Galle, F.C. 1997 Hollies ,The Genus Ilex. Timber Press, Inc., Oregon.