

## You Say You Want a Revolution: Reinventing the Garden Camellia<sup>©</sup>

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### BACKGROUND

During the middle portion of the 20<sup>th</sup> century, landscape architects and backyard gardeners in Zones 7a-9 began to appreciate the versatility of the *Camellia sasanqua* as an American garden staple. Venerable cultivars from Japan were imported by Toichi Domoto on the West Coast and Tsukasa Kiyono in the Southeast. Likewise, near Mobile, Alabama, new cultivars were being bred and introduced by Kosaku Sawada at his Overlook Nurseries. Subsequently, *C. sasanqua* became popular enough that they were distinguished from *Camellia japonica* and gained their own vernacular as “Sasanquas”. The terms “japonicas” and “sasanquas”, although taxonomic sins, are still useful epithets for grouping the garden camellias.

*Camellia sasanqua* is now accepted to include *C. hiemalis* and genetically that can easily be accepted. Nonetheless, there are distinct differences regarding their functionality within the garden. *Camellia hiemalis* carries DNA from an ancient cross with *C. japonica*. The *C. japonica* provided the offspring more complex flowers with striking color combinations (significantly red influence from anthocyanin) in addition to heavier petal and leaf substance. Generally, it also contributed a higher degree of disease resistance than that usually seen in *C. sasanqua*. Still, the *C. hiemalis* have all the vegetative appearance within the garden of a *C. sasanqua*. Notable examples are the cultivars ‘Mine-no-yuki’ and ‘Shishigashira’.

There are nearly 30,000 named cultivars within the 250 or so species that comprise the genus, *Camellia*. Given that growers in the United States currently produce several hundred of these cultivars, does the nursery industry and gardening world need yet another camellia? In the mid-1990s when I asked myself this question, I would hear the distinctive voice of the philosopher/ballplayer Yogi Berra answer; “Nobody goes there anymore, it’s too crowded.”

Even so, from a 21<sup>st</sup> century garden perspective, most of the mid- 20<sup>th</sup> century *Camellia sasanqua* were problematic. Aspiring to be tree-like in habit, they grew to be large structures. Consequently, when they could not conform to more modest size landscapes, they were either removed or consistently pruned to the point of flower bud cessation. From a pathologist’s perspective, many were a magnet for *Glomerella cingulata*, an all-too-common slow necrosis, inherent to many *C. sasanqua*. The cultivars ‘Cleopatra’, ‘Rosea’, ‘Cotton Candy’, ‘Setsugekka’, and many others in the warm, humid areas of Zones 8-9, are especially susceptible. *Glomerella* is a concern today with many cultivars losing resistance. *Camellia sasanqua* have, after all, only been planted in appreciable numbers in the American South during the last 80 years.

The focus of all of Sawada’s work was with *C. sasanqua* (Sawada, 1953). He had released 18 cultivars by 1953, but none with *C. hiemalis* genetics. Although lovely in their simplicity, by 1990 in the Deep South, many were all but extinct because of *Glomerella cingulata* dieback (Fig. 1).

### The Most Exciting Phrase to Hear in Science, the One that Heralds New Discoveries, Is Not ‘Eureka!’ but ‘That’s Funny...’ (Isaac Asimov)

In the late 1980s, plantsman, Tom Dodd Jr., told me, “I don’t have a “sasanqua” in my garden.” He had noted the alarming spread of *Glomerella* affecting mature *C. sasanqua* in the Mobile, Alabama area. The most useful, floriferous, compact, disease-resistant cultivars of “sasanquas” contained *C. hiemalis*. Incredibly, until then, very little hybridizing occurred with *C. hiemalis*. I was privileged to see first-hand the remarkable success Dodd was experiencing with open-pollinated *C. hiemalis* as the seed parents including ‘Mine-no-yuki’, ‘Shishigashira’, ‘Leslie Ann’, and a few others.

In the abbreviated time frame in which Dodd focused on camellias, he introduced several which are now widely grown. The cultivars ‘Alabama Beauty’ (syn. ‘Mr. B’), ‘Jessica’s Ruffles’, ‘Stephanie Golden’, and ‘Reverend Ida’ are among his best. By 1994, Mr. Dodd’s hybridizer’s eye had turned to the *Ilex*. Having learned from Dodd’s successes, we began an effort to concentrate on the *C. hiemalis* group.



Fig. 1. *Glomerella cingulata* dieback (left) and lesions (right) on *Camellia sasanqua*.

#### THE GOALS OF OUR CAMELLIA PROGRAM WERE

- Compact, yet vigorous forms — “semi-dwarf” must still require the plants have sufficient life-sustaining force for less-than perfect environments.
- Robust, upright, dense forms — plants suitable for use as specimens or for screening.
- Disease resistance — most significantly to *Glomerella cingulata* and *Phytophthora* spp.
- Floriferousness at an early age — a plant in a 3-gal container requires adequate bud production for the garden center trade.
- Ease of production in a nursery environment — roots readily, tolerates both varying irrigation regimes and soil media consistencies.

We have attempted to be careful when introducing a new cultivar. To date we have selected 14 plants from roughly 40,000 open-pollinated crosses.

Few plants are able to create their own market despite how “revolutionary” they may appear to the mindset of the breeder. Coca Cola devotes \$3 billion annually to advertising its brand which is recognized by 94% of the world’s population. Plant Development Systems’ Southern Living Plant Collection has provided the majority of our camellias with a very happy home within their palette of plant materials.

#### OVERVIEW OF SOME OF THE MORE RECENT CAMELLIAS GREEN NURSERIES HAS RELEASED

The following is a brief overview of some of the more recent camellias Green Nurseries has released to the trade. Mature dimensions are for 7-years establishment in the landscape with normal pruning.

- *Camellia sasanqua* (*hiemalis*) ‘Green 99-006’, October Magic<sup>®</sup> Bride sasanqua hybrid camellia. USPP 20,539. Dense, rounded to pyramidal habit to 1.5×1.5 m (5×5 ft). Dark green, glossy leaves. Slow growth. Small, double, white mass bloomer in midseason.

- *Camellia sasanqua* (hiemalis) ‘Green 94-035’, October Magic<sup>®</sup> Orchid sasanqua hybrid camellia. USPP 20,465. Dense, rounded habit to 1.5×1.5 m (5×5 ft). Dark green, glossy leaves. Medium growth. Small, double pink blends, mass bloomer early to midseason.
- *Camellia sasanqua* (hiemalis) ‘Green 99-016’, October Magic<sup>®</sup> Ivory sasanqua hybrid camellia. USPP 24,887. Dense, upright habit to 2.4×1.5 m (8×5 ft). Dark green, glossy leaves. Fast growth. Large double white flowers. Mass bloomer in midseason.
- *Camellia sasanqua* (hiemalis) ‘Green 02-003’, October Magic<sup>®</sup> Ruby sasanqua hybrid camellia. USPP 24,538. Dense, rounded growth to 1.2×1.2 m (4×4 ft). Small, dark green leaves. Average growth. Medium double red flowers, mass bloomer in midseason (Fig. 2).
- *Camellia sasanqua* ‘Green 98-006’, October Magic<sup>®</sup> Rose sasanqua camellia. USPP 20,539. Dense growth with pyramidal to columnar habit to 3×1.2 m (10×4 ft). Fast growth. Small, double salmon red flowers, mass bloomer in early-mid-season.
- *Camellia sasanqua* (hiemalis) ‘Green 99-031’, Susy Dirr camellia. USPP 24,888. Dense, upright to rounded growth to 3×2.1 m (10×7 ft). Large, dark green leaves. Exceptionally fast growth. Large double, pink flowers, midseason.



Fig. 2. *Camellia sasanqua* ‘Green 02-003’, October Magic Ruby<sup>®</sup> camellia.

### **Propagation and Production**

Cuttings are taken from June through September. Following a basal quick-dip of Dip N<sup>®</sup> Grow<sup>®</sup> at 2800 ppm, they are placed in a medium of 4 coarse perlite and 1 vermiculite (v/v). The rooting process takes place in 5 × 10 cell-trays with a cell depth of 11 cm (4.5 in.) (T.O. Plastics PL-50-STAR-DP.) Under intermittent mist, root initiation occurs in 15-20 days. Rooted cuttings are overwintered in heated houses and kept to a minimum temperature of 4°C (40°F). During the following April, liners are transplanted to 15-cm-deep (6-in.) containers and placed on a gravel bed under 30% shade. There is a 95% success rate of the rooted liners utilized. There are three sheering periods and in the following March the liners are transplanted to 3-gal containers. By October, the containerized plants are marketable, 30 months after propagation (Fig. 3).



Fig. 3. Cut-away of 15-cm (6-in.) container with the lighter-colored liner root system.

### THE FUTURE

The amazing influx of new-to-the-western-hemisphere camellia species with selections of sect. *Paracamellia* and sect. *Oleifera*, have caught this hybridizer's eye. Such species as *C. grijsii* (syn. *C. yuhsienensis*) and *C. brevistyla* in particular, have proven to impart numerous desirable characteristics when crossed with the *C. sasanqua* group. Dr. K. Hagiya crossed *C. yushienensis* with *C. sasanqua* (hiemalis) 'Shishigashira' produced the hybrid 'Yume' (Dream), a delightful semi-dwarf camellia with disease resistance and floriferous blooming habit. Within Zone 8, the flowering season of 'Yume' begins in October and extends into March. Recent work on petal blight resistance shows promise for *C. yushienensis* and its hybrids. Recent crosses with 'Yume' as the seed parent have produced striking plants with bicolored flowers throughout winter. The buds are moderately cold hardy. The growth habits can range from groundcovers to vigorous large shrubs.

*Camellia brevistyla* is a close *C. sasanqua* relative with clusters of tiny white flowers in fall. Small leaves are carried on a sturdy, petite scaffold of branches. The species carries the desirable trait of cinnamon colored bark, intensified by cool weather. This is a feature we have been able to transmit to some offspring when crossed with *C. sasanqua*. The bark characteristics, coupled with tiny flowers, and ease of culture open a new world of interest. Perhaps it will be the perfect container camellia of the future? These and other interspecific hybrids with similarities to *C. sasanqua* have blurred the specific epithets of *C. sasanqua* and *C. japonica* to such a degree that the old vernacular of "sasanquas" and "japonicas" has taken on a newfound validity.

### Literature Cited

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