Hidden Treasures of the Arboretum

Pleasing *Polyspora*

By Walt Bubelis

While strolling along the Lookout Loop Trail in June, close to where it intersects with the New Zealand Forest, I came across an attractive plant that I'd never noticed before. It was a small, erect, broadleaf tree, with long, glossy, serrated leaves, large camellia-like flower buds, and ripening fruits that looked for the world like enormous green acorns. Peeling, tan-colored bark also enhanced the display.

The plant didn't register with me, and the attached metal tag gave only an accession number (135-99*A), which I noted down. Later, I consulted the Arboretum's online interactive map (http://depts.washington.edu/uwbg/gardens/map.shtml) and searched using the number. The website gave me a name that I didn't recognize: *Polyspora speciosa* (a synonym of *Polyspora kwangsiensis*).

Further research revealed the plant to be an evergreen member of the tea family (Theaceae) that grows wild in the forests of China and Vietnam and reaches 15 and 45 feet tall in its natural habitat. Closely related to *Camellia,*

ABOVE: The leaves, flower buds, and acorn-shaped fruit of *Polyspora speciosa*. (Photo by Niall Dunne)

OPPOSITE: *Polyspora speciosa* in bloom in the Arboretum in October. (Photo by Walt Bubelis)

Gordonia and *Franklinia*, the genus *Polyspora* contains about 40 species, all indigenous to East and Southeast Asia.

The Arboretum's digital map showed a specimen of another species, *Polyspora axillaris*, quite close to the *P. speciosa*. I returned to the site, and sure enough, *P. axillaris* was there, just slightly upslope and south of its cousin. Another attractive plant, native to China, it doesn't grow as tall as *P. speciosa* (about 20 feet at most) and produces mostly entire, obovate leaves (shaped like an egg, but with the wide end at the tip).

Family Ties

Both plants have had recent name changes, having resided in the genus *Gordonia*, among others. Within the last 15 years or so, the roughly 40 Asian species of *Gordonia* were transferred to the genus *Polyspora*.

Gordonia is one of many plant genera with disjunct distribution (where related species are widely separated geographically) between the eastern United States and China. In the southeastern U.S., we have *Gordonia lasianthus*, the loblolly bay. This plant grows up to 70 feet tall and is used for cabinet wood. Just one other species of *Gordonia* is found in the New World, namely *G. fruticosa*, of the tropical forests of Central and South America. (Some botanists include the Franklin tree, *Franklinia alatamaha*, formerly of Georgia—but now extinct in the wild—as *Gordonia*, but research indicates that this plant is more closely related to the Asian genus *Schima*.)

Polyspora species were originally thought to be members of the genus *Camellia*, but once seed pods are compared, you can see an obvious difference: *Polyspora* seed pods open to five valves, whereas there are just three in those of *Camellia*. Another key difference is in the shape of the seeds: *Polyspora* seeds have wings, while *Camellia* seeds don't.

The Arboretum Specimens

I asked Ray Larson, Curator of Living Collections at UW Botanic Gardens, about the history of the Arboretum's *Polyspora* specimens. He consulted the plant records and found that we procured eight cuttings of three species of *Polyspora* from Rancho del Descanso Nursery in La Cañada, California, in 1999. These cuttings were planted

LEFT: The foliage and flower buds of *Polyspora axillaris.* (Photo by Niall Dunne)

RIGHT: Fullmoon ® *Polyspora* in bloom. (Photo courtesy Corinne Hollister)

out in the Arboretum in 2002, but only two survived—the *P. speciosa* and *P. axillaris* I found along the trail. A single specimen of another species, *P. chrysandra* was among the original batch, but it did not survive beyond the initial planting.

Polyspora axillaris is well established in cultivation, but our specimen doesn't appear to be doing so well, compared to the healthier-looking *P. speciosa.* Perhaps it's a hardiness issue, with *Polyspora speciosa* rated for the cooler USDA Zone 7b and *P. axillaris* hardy to Zone 8b. Available in nurseries from Dan Hinkley's Plant Collection at Monrovia is a cultivar of another species, *Polyspora longicarpa*, being sold as Fullmoon® *Polyspora* (*Polyspora longicarpa* 'MonSaPaRby' PPAF). This plant is rated for hardiness Zones 7 to 11 and grows up to 12 feet tall.

The Arboretum plants are getting direct sun for at least half the day, which seemed to be helping them set numerous flower buds, particularly in the case of *P. speciosa.* General growing recommendations for the genus seem to be the same as for camellias and loblolly bay. That is, partial shade to full sun in organically rich, slightly acidic, moist but well-draining soil. Growing the plant in partial shade will likely ensure more favorable moisture conditions but may also decrease flower bud set.

Gorgeous, Late-Season Flowers

If you're lucky enough to locate a nursery specimen of *Polyspora*, whatever the name, you'll undoubtedly enjoy the blossoms. Large, five-petaled white flowers appear in autumn, winter or early spring, depending on the species. The resemblance to the single flower of species *Camellia*—with their multitude of yellow stamens in the center—is striking. A not-particularly-flattering common name for *P. axillaris* is the fried-egg plant. I suppose, from a distance, a *Polyspora* in peak bloom can look a little like it's covered in eggs, over easy.

I returned to the Arboretum's *Polyspora* specimens on a regular basis in the fall. In mid-October, *Polyspora speciosa* burst into bloom and flowered for about two weeks. As I write this, in late October, *P. axillaris* has yet to bloom. An article I found by Professor David Creech at SFA Mast Arboretum, in Nacogdoches, Texas, says that this species has a tendency to flower there in November or December. The bloom time for Fullmoon® *Polyspora* blooms is marketed as "winter or early spring."

Because of its handsome evergreen leaves and bark, *Polyspora* is a plant for any season. Use it as a focal point in a landscape large enough to accommodate the eventual growth. *Polyspora* also looks great in woodland settings with dappled light. Dan Hinkley also recommends Fullmoon® *Polyspora* for mass plantings to create a tall, natural background hedge or screen. If you don't have room for the plant in your own garden—and you need a good flower fix in the cool season—visit the Arboretum and track down our pleasing *Polyspora*.

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