Arboretum News
A Newsletter of the Armstrong Atlantic State University Arboretum
Issue 7  Fall 2010
From the Editor:

After a two year hiatus, I’m pleased to be able to present you with another copy of Arboretum News. Much has happened on the campus in the last two years with continuing expansion of both major and minor plant collections in the Arboretum. In this issue, we’ll explore the White Garden, the genus Daphniphyllum and the donation of many exciting species and selections of Camellia.

I’ve had the opportunity to show the Arboretum to many different garden clubs, landscape and horticulture professionals and plant enthusiasts over the last few years. One question that I’m always asked is, “How many workers take care of the Arboretum?” My response usually surprises them. The Arboretum is maintained by the grounds staff in the Department of Plant Operations. The grounds staff currently numbers seven full time employees and four part time or student workers. They have mowed, mulched, edged, blown, weeded, planted and pruned throughout the long hot summer to keep the Arboretum looking its best. It’s a lot of work for such a small staff, but they take pride in what they do and appreciate kind comments. So, if you like what you see in the Arboretum, thank a groundskeeper.

I would like to thank Bob McCartney of Woodlanders Nursery in Aiken, S.C. for his frequent visits to Armstrong, for sharing his vast and varied knowledge of plants and for encouraging fellow plant enthusiasts to visit our campus. I would also like to thank him for his donation of unique plants to the Arboretum including Phytolacca dioica, a relative of our native pokeweed from South America that grows into a tree.

Arboretum staff, clockwise from top left: Matt Hefner; Simon Driggers; Donna Rigdon; Dennis Moore; Walter Pollard; Janice Nease; Mike Carr; Danuta Campbell; and Jaime Jama.
A late afternoon stroll in August through the White Garden behind Burnett Hall can be intoxicating. The air, already thick with humidity, is heavy with the sometimes sweet, sometimes musky scent of flowers all trying to attract the attention of a bee, moth or hummingbird. The White Garden is a collection devoted to plants with white flowers or white variegated foliage and is best experienced at dusk.

The White Garden has given us the opportunity to plant white-flowering selections of many plants that are traditionally not white. You will find White Lily of the Nile (Agapanthus praecox ‘Getty White’), White Mexican Petunia (Ruellia brittoniana ‘White Katie’), and the contradictory White Purple Coneflower (Echinacea purpurea ‘White Swan’). Many large growing perennials grow in the garden too, such as White Bush Clover (Lespedeza thunbergii ‘White Fountain’), Sweet Almond Verbena (Aloysia virgata), and White Golden Dew Drop (Duranta erecta ‘Alba’). The collection contains many small trees and shrubs such as the heavy blooming Natchez Mockorange (Philadelphus x virginalis ‘Natchez’), Fothergilla (Fothergilla ‘Mt. Airy’), and Dove Tree (Davidia involucrata). Tropicals with white flowers are here too, including White Bird of Paradise (Strelitzia nicolai), White Variegated Elephant’s Ear (Colocasia esculenta ‘Nancy’s Revenge’) and Giant White Calla Lily (Zantedeschia aethiopica ‘White Giant’). Take a look at some of the other plants in our collection on the following pages.
**Bauhinia lunaroides**

Known commonly as Texas Plume or Anacacho Orchid Tree, this small multi-trunked shrub or small tree is native only to a few canyons in western central Texas and in adjacent northeastern Mexico. The fragrant white flowers appear in clusters in the spring and summer followed by a flattened pod typical of members of the Fabaceae (Pea Family). Fast growing once established, this species is drought tolerant and reportedly deer resistant.

**Strobilanthes lactatus**

White Persian Shield develops into a soft-stemmed, low-growing perennial with thick, quilted leaves to eight inches long splashed with silvery white. Heat-loving and relatively pest-free, it should be grown in part or full shade for optimum leaf color and growth.

**Plumbago auriculata var. alba**

This white flowering variety of the typically blue flowering Cape Leadwort has the same familiar cascading growth habit as the species with whip-like stems and light, yellowish-green leaves. A semi-evergreen shrub, this native of South Africa blooms for much of the spring, summer, and fall.

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Exochorda x macrantha ‘The Bride’

Commonly known as Pearlbush because its flower buds purportedly resemble white pearls, this hybrid produces long racemes of five-petaled, almost blindingly-white flowers early in the spring. This cultivar grows into a dense, compact, deciduous shrub only three or four feet tall with a graceful, spreading and weeping habit. Pearlbush has a reputation as a tough, drought-tolerant ornamental, but non-irrigated plants on campus performed poorly compared to plants growing in better conditions in the White Garden.

Stokesia laevis ‘Alba’

White Stokes Aster produces a multitude of fluffy, cornflower-like, white flowers in the summer above rosettes of green strap-like leaves. Growing only eighteen inches tall and wide, this easy to grow evergreen perennial needs well-drained soil and sunlight. Native to the southern United States, our plants have persisted in the garden for many years and seem to be long lived.

Sinningia tubiflora

Hardy White Gloxinia is an eye catching perennial from Argentina and Uruguay forming a spreading mat of soft, fuzzy, silver-gray leaves. Two foot tall flower stalks topped by fragrant, pendulous, long tubular white flowers with broadly flared petal tips are produced all summer long. Surprisingly drought tolerant, grow in full sun but be prepared to do a little digging to control its spreading nature. A member of the Gesneriaceae family and related to African Violets, Hardy White Gloxinia comes close to providing the felt like leaves of Lamb’s Ear (Stachys byzantina) on a plant that can survive coastal Georgia’s heat and humidity.
Carex oshimensis ‘Evergold’

Variegated Japanese Sedge forms a weeping clump of evergreen leaves with a bright creamy-white stripe down the middle. Growing from one to two feet tall, this Japanese selection is deer resistant and easy to grow.

Chlorophytum saundersiae

The grass-like Saint Bernard’s Lily forms a clump of long, narrow dark green leaves between one and two feet tall. Showy white flowers with yellow stamens persist throughout the year. A native of the Eastern Cape of South Africa and Swaziland, Saint Bernard’s Lily bears spikes of small white flowers with yellow stamens most of the year.

Ornithogalum saundersiae

Known by the common name of Giant Chincherinchee in its native South Africa, this evergreen perennial bulb is one of my favorite plants in the collection. Clean looking rosettes of erect, dark green, shiny, sword-shaped leaves multiply rapidly to produce dense stands. In the summer, flower stalks up to five feet tall develop multiflowered inflorescences of white star-shaped flowers with a pronounced black ovary in the middle. The common name, chincherinchee, refers to the sound made by the stiff, glossy flower stalks when they are rubbed together by the wind.
**Callicarpa americana var. lactea**

The white fruited form of our native Beautyberry has the same ease of maintenance and durability as its purple-berried cousin, but with snow white berries in the fall. A deciduous shrub growing six to eight feet tall, Beautyberry grows best in broken shade with well drained soil. Native to the southeastern United States, Beautyberry is great for naturalizing areas and providing food for wildlife.

**Malvaviscus arboreus var. drummondii ‘Alba’**

While its botanical name is a mouthful, White Turk’s Cap makes an easy-to-grow and durable perennial. Scrambling on itself to three feet tall by three feet wide, this hibiscus relative is drought-tolerant and deer-resistant. It flowers best in full sun, but it can take some shade. White Turk Cap’s petals never fully unfurl producing a narrow funnel shaped flower. This shrub is native to tropical regions of Mexico through the U.S. Gulf Coast.

**Euphorbia ‘Diamond Frost’**

This Euphorbia with finely texture foliage produces masses of small white bracts throughout the growing season. Creating small mounds only one or two feet tall, this cultivar does best with a little shade, but can withstand heat and drought. Like most Euphorbia species, Diamond Frost’s milky sap probably contributes to its deer resistance.
Camellias Donated to Arboretum

One of a kind hybrids and unusual species will enhance campus collections.

By Philip Schretter

The Arboretum recently received a donation of over 400 camellias from the Southeastern Camellia Society. Mr. Gene Phillips, president of the Southeastern Camellia Society, facilitated the gift. Many of the plants were part of a private collection donated to the society for preservation purposes by Dr. Clifford R. Parks, a professor emeritus of biology at the University of North Carolina at Chapel Hill. Parks is a renowned authority on the botany and horticulture of the genus Camellia. Included in the donation are several unusual species such as *Camellia azalea*, *Camellia gauchowensis*, *Camellia pubifurfuracea*, and *Camellia lapidea*, which have been planted in the Camellia Garden on campus. Some of the plants donated are seedlings grown from seed gathered by Parks in China from localized populations. Also included in the donation are many hybrids created by Parks, focusing on improving yellow flowering forms of Camellia. Many of the yellow flowering species of Camellia such as *Camellia flava* and *Camellia nitidissima* are tropical and sub-tropical in origin and perform poorly in temperate climates. By hybridizing these tender species with more cold tolerant ones, harder yellow flowering forms are possible. When asked about Parks’ hybridizing efforts, Phillips said, “It would be accurate to say that the flava hybrids are likely going to be hardier than the original *Camellia flava* species. The purpose of Parks’ breeding effort with flava was to attempt to transfer more yellow pigment from this yellow flowering species to the offspring than had been achieved with hybridization involving other yellow flowering species. Breeding results using other yellow flowering species such as *Camellia nitidissima* have had limited success in developing intense yellow in the hybrids. Parks felt that *Camellia flava* may have had better yellow pigment transfer. The flava hybrids that you have at Armstrong are the individual seedlings, so they are unique from any others including the flava hybrids donated by Parks that are located at the Judge Arthur Solomon Camellia Trail at the Bamboo Farm.” Phillips also added, “The gene pool contained within the Parks Collection is incredibly valuable to present and future camellia gardeners. Our vision of eventually establishing his collection in numerous locations is designed to preserve these unique species and cultivars, while at the same time having an opportunity to evaluate their potential within the landscapes in public settings. The offspring of these species and cultivars will one day change the entire perception of camellias to the gardening public.”
AN. How long have you worked at Armstrong?

DM. I’ve been employed here for three and a half years.

AN. What are your job duties?

DM. My title is Groundskeeper III, which means I’m the landscape crew foreman. I make sure that day to day maintenance jobs get done. I also work on turf maintenance and various construction projects. I did most of the work on the teahouse in the International Garden.

AN. What is your favorite part of the job?

DM. Working at Armstrong makes it possible for me to attend classes. I am currently working towards a teaching certificate. Being a part of Plant Operations also allows me to work with a lot of interesting individuals at this beautiful campus.

AN. What is your favorite plant on campus?

DM. I’ve lived in Massachusetts for most of my life, so picking one favorite plant is difficult. It’s nice to see the palm trees. The century plant is quite interesting with its unique structure, bluish evergreen foliage, and from what I’ve been told blooms once only every hundred years. I think the many colors of the camellias and hydrangeas are outstanding and I really like the white, fragrant camellias. They smell spicy.

AN. What do you like to do for fun when you’re not at work?

DM. While not working I spend as much time as I can with my three sons. We go boating, fishing, and crabbing. I like bicycling and playing my drums too.
Daphniphyllum

An Oddity in the Southern Landscape

By Philip Schretter

The genus *Daphniphyllum* contains about 25 species of evergreen shrubs and small trees native mostly to eastern Asia and the Malay Archipelago. It is the sole genus in the family Daphniphyllaceae. The name *Daphniphyllum* suggests that it should have leaves that look like *Daphne*, but *Daphnes* have small leaves compared to the long, broad leaves of *Daphniphyllum*. *Daphniphyllum* looks more like an exotic, broadleaf *Rhododendron*. It is possible the author of this genus, German-Dutch botanist Carl Ludwig von Blume (1796-1862), was referring to a laurel (*Prunus laurocerasus*), a plant known as *Daphne* by the ancient Greeks, when he named this plant. *Daphniphyllums* resemblance to *Rhododendrons* is superficial, because *Daphniphyllum* and *Rhododendron* are not even in the same order of plants, so they are not closely related. *Daphniphyllum* flowers are inconspicuous and easily overlooked and male flowers and female flowers are borne on separate plants. Fruits are small, single-seeded, blue or black drupes. *Daphniphyllums* are woodland shrubs and prefer moist, humus-rich, well-drained soils. They prefer to grow in part shade but can tolerate full sun with adequate moisture.

If any of the *Daphniphyllum* species could be considered common, it would have to be *Daphniphyllum macropodum*. Native to China, Japan, and Korea, this species can grow to 60 feet tall in its native habitat but a 30 foot tall large rounded shrub would be more likely in coastal Georgia. A twelve-year-old specimen in the Arboretum on the west side of the Science Building is about 20 feet tall and 15 feet wide. Large, dark-green leaves growing to 12 inches long and four inches wide have noticeable pink to red colored petioles. New growth
is produced in whorls at the branch ends. Female flowers are green to creamy white and usually hidden beneath the leaves. No good English common name has been settled on so the generic name *Daphniphyllum* is usually used, although some nurseries use the Japanese common name and call it the Yuzuri-ha Tree. In its native China, the leaves of this species are reportedly cooked and served as a “New Year’s green,” but conflictingly, alkaloids in the stems protect it from being eaten by deer. I think I’ll pass on this one at the table.

Similar to *Daphniphyllum macropodum*, but with smaller leaves and a more shrub-like habit is *Daphniphyllum macropodum* var. *humile*. Native to the northern islands of Japan and the Kuril Islands of the Russian Far East, specimens on the north side of Lane Library have grown to six feet tall and five feet wide in ten years.

*Daphniphyllum himalense* is a species native to China, Japan, Korea and west to India and Nepal. A 10 foot tall, upright, open small tree grows on campus on the north side of the Recreation Building.

*Daphniphyllum glaucescens* is a species native to China and Taiwan with attractive, glaucous blue leaves. Plants in front of the Recreation Building have grown 10 feet tall in four years.

*Daphniphyllum calycinum* is a species native to China, Japan and Vietnam. The leaves of this species are noticeably lighter green compared to the other species in the Arboretum. Five-year-old plants growing in the Arboretum on the north side of the Recreation Building are six feet tall and flower and fruit heavily.

*Daphniphyllum teijsmannii*, a compact species with smaller leaves, is native to Japan and Taiwan. A nice three-year-old specimen grows on campus in front of the Recreation Building.

And lastly, a new specimen planted in the Arboretum this fall on the north side of the Fine Arts Building is *Daphniphyllum* aff. *chartaceum*. This plant closely resembles or may be related to *Daphniphyllum chartaceum*, but until a more definitive name is assigned, the term affinis (aff.) is used in its title. The term affinis is used when the identity of a species is unknown but it has a striking similarity or close relation with a known species.
Century Plant Blooms

An Agave salmiana growing in front of Solms Hall on the Armstrong State University campus decided it was time to flower this past spring. Commonly known as White Agave or Century Plant, this large, architectural succulent with its thick, grey-green leaves can grow five feet tall by twice as wide. When the plant matures, it produces a flower stalk up to forty feet tall bearing a candelabrum of yellow flowers. The actual flowers are rather inconspicuous because of their small size and the height at which they appear. The entire plant will die back after it blooms, leaving behind a colony of suckers that will produce a replacement plant. Although one of its common names implies that it blooms once a century, under the right conditions it can bloom sooner. Our plant is only about ten years old. This native of Central Mexico is one of the commercial sources of agave nectar, along with its close relative Agave tequilana, commonly known as Blue Agave or Tequila Agave.

Photo courtesy of Katherine Arntzen