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# Sweet Pepperbush: A Summer Sensation

Michael A. Dirr

**Native to the wetlands of much of eastern North America, *Clethra alnifolia* is now spreading into the cultivated landscape.**

My olfactory senses have often been inundated by the sweet floral perfume of the seemingly ubiquitous sweet pepperbush that occurs along water edges and moist areas throughout its Maine to Florida range. While *Clethra alnifolia*'s landscape worthiness has never been exploited by gardeners and nurseries, new and resurrected cultivars of the species are currently stimulating interest. Gardeners are pleading for flowering shrubs out of synchronization with the April-May bonanza. *Clethra* typically flowers in July and August, and it is obvious from observing native populations that selections for a continuum of flowering times could be made.

The delightful sweet floral fragrance from which the plant derives its common name is among the best in the shrub world. The individual five-petaled, white flowers are 8 millimeters in diameter and occur in racemes 5 to 15 centimeters long (2 to 6 inches) and 2 centimeters wide (0.75 inches). The fruit is a dry, dehiscent, five-valved capsule that persists into winter.

The lustrous medium to dark green leaves are 3 to 10 centimeters long (1 to 4 inches) and sharply serrate. In the fall the leaves develop a lovely golden to yellow color that ages to a golden brown. The fall foliage, like that of *Fothergilla* and *Calycanthus*, is quite long-lasting, due in part to its resistance to damage from freezing temperatures.

The growth habit of this late-summer-blooming shrub is distinctly rounded to broad-

rounded because of its suckering, colonizing nature. Size is extremely variable with a height of 2 to 3 meters (6 to 9 feet) occurring most commonly. However, at the Howe Estate in Newport, Rhode Island, I stared in disbelief at a six-meter-tall (18 feet) specimen and muttered repeatedly, "It's not supposed to grow this large."

In the Arnold Arboretum's extensive collections, *Clethra alnifolia* is represented by seventeen different accessions, with #23139-A (a compact, densely branched, heavily flowered colony of unknown origin) measuring 2.5 meters high (8 feet), 12 meters wide (36 feet), and 13 meters long (40 feet). Remarkably it is prospering in the shade and root competition of two large shagbark hickories (*Carya ovata*).

## Propagation

*Clethra* is easily propagated from seeds that require no preconditioning and can be sown as soon as ripe. Softwood cuttings root readily with or without a hormone treatment, but a five-second dip in an aqueous solution of 1000-ppm KIBA is an inexpensive insurance. Jack Alexander, chief propagator at the Arboretum, and I conducted a media rooting study utilizing *Clethra alnifolia* as the test plant. Rooting was 94% in a peat and perlite mix, 83% in perlite, 78% in peat, and 56% in sand or sand/perlite. *Clethra* is one of the few plants in which cuttings continue to grow while under mist.



A large colony of *Clethra alnifolia*, Accession #23139-A, growing at the Arnold Arboretum. Of unknown age, the colony is now 2.5 meters high, 12 meters wide, and 13 meters long. Photo by Rácz and Debreczy.

The cultural adaptability of *Clethra alnifolia* is phenomenal, and I have observed thriving specimens throughout the upper Midwest, New England, and south into Georgia. The species adapts to wet and dry sites as well as to a variety of soil pH's. The dry New England

summer of 1991 exposed many shrubs, such as weigela, deutzia, philadelphus and hydrangea, as less than drought tolerant. Sweet pepperbush, however, showed no signs of drought stress. But mites can be a problem when conditions are extremely hot and dry.

With the new and resurrected cultivars, *Clethra* can find a home in any landscape. Mass plantings along waterways and shady areas are always effective. Use the pink-flowered or compact forms in shrub and perennial borders. I used the pink form as a foundation plant in my Georgia garden and have pruned it back once in thirteen years. Since

flowers develop on the new growth of the season, late winter or early spring pruning is recommended.

#### Cultivar List

'Anne Bidwell' was grown by Mrs. John Bidwell, of Cotuit, Massachusetts, from, *C. alnifolia* seed purchased through F. W.



*The inflorescences of Clethra alnifolia, Accession #23139-A. Photograph by Rácz and Debreczy.*

Schumacher of Sandwich, Massachusetts. The habit is more restrained (4 to 6 feet high) than the species, but the genuine difference resides in the large, multibranched, almost fluffy, flower panicles that are 10 to 15 centimeters long (4 to 6 inches) and 8 to 12 centimeters wide (3 to 5 inches). In Massachusetts the flowers open two to three weeks later than those of the species. This clone is currently being propagated and will soon be released through the Arnold Arboretum's Plant Introduction Program. An announcement of its availability will appear in a forthcoming issue of *Arnoldia*.

'**Compacta**' ('Nana') was given to me by Mr. Vincent Simeone, an undergraduate at the University of Georgia, who obtained it from a friend on Long Island. It is more compact than the species and will probably mature between 1 and 1.5 meters tall (3 to 4 feet). Leaves and flowers, to date, are smaller than those typically found in the species.

'**Creel's Calico**' is, as of this writing, an unreleased selection with beautiful variegated foliage. The leaves emerge with cream variegation that is primarily speckled but with some solid areas on some leaves. In transition the leaves are bright green with creamy variegation; in maturity, they are black green with pure white variegation. The leaves are large and average 10 centimeters long (4 inches). The original plant was a stoloniferous colony about one meter high (3 feet). To my knowledge, this is the first variegated clone of the species. In shady environments, a mass planting would provide eye-catching color.

'**Hummingbird**' is the current *haute couture* of plant fashion. Its compact habit (1 to 1.5 meters), in conjunction with normal-sized leaves, flowers, and fruits, is this cultivar's principal asset. Plants will be wider than high at maturity. Random measurements of twelve

inflorescences produced a range from 7 to 19 centimeters (2.75 to 6.25 inches) with an average length of 10 centimeters (4 inches). At Swarthmore College, 'Hummingbird' is used as an effective ground cover. I am extremely positive about the landscape possibilities of this selection. Fred Galle of Hamilton, Georgia, is responsible for bringing this plant into cultivation.

'**Paniculata**' supposedly represents a clone with multibranched inflorescences. What currently poses in the trade for 'Paniculata' is doubtful and certainly no better than what can be found in many wild populations. I surveyed several native populations on Cape Cod and found everything from the single unbranched raceme type to many clones with the multibranched racemose-panicle.

'**Pink Spires**' and '**Rosea**' (forma *rosea*) are pink-flowered forms with the wonderful fragrance of the species. Although 'Rosea' is described as pink fading to pinkish white, plants in my Georgia garden maintain the pink coloration until senescence. Supposedly, 'Pink Spires' remains uniformly pink throughout the flowering cycle. I examined both clones at the Arnold and saw no difference in color. 'Rosea' was introduced in 1906, and it is possible that 'Pink Spires' is simply a rename. Both clones are vigorous growers, easily reaching 2 to 3 meters (6 to 9 feet). The leaves are lustrous dark green, perhaps several degrees darker than the white-flowered types. Inflorescences average 7 to 9 centimeters (3 to 3.5 inches), and the buds are deep rose-pink while the open flowers are lighter pink. In both of these clones, the peak flowering period is about a week later than the species.

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Michael Dirr is a Professor of Horticulture at the University of Georgia in Athens and recently concluded a sabbatical leave as a Putnam Fellow of the Arnold Arboretum.