Slug: Ask the Master Gardener

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# **Beautyberry For Fall Color**

### **HEAD:**

Beautyberry for fall color

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### **BODY:**

It's easy to be skeptical of a plant with "beauty" in its name, but it's difficult to find a better word to describe a beautyberry shrub in autumn. The spectacular display of shining violet or white fruits clustered along the stems is reason enough to find a place for one of these shrubs in the garden.

Several beautyberry species and cultivars are suited to the climate and soil conditions in this region. Most frequently recommended for gardens is the Profusion beautyberry (*Callicarpa bodinieri* var. *giraldii* 'Profusion'), native to China. It's an upright, deciduous shrub with slender stems and toothed leaves that grows to about six feet in height and width.

During summer, sprays of light pink or lilac flowers appear at the base of leaf stalks on the current year's growth. In fall, clusters of small, berry-like fruits called drupes form along the stems, turning from green to dark violet.

The features that make 'Profusion' a preferred form for gardens are its more compact growth habit and its changing foliage that starts out bronze-toned in spring, brightens to green in summer, then warms to pinkish-purple in autumn. As autumn progresses the leaves fall, revealing the clusters of lustrous ornamental fruits set off against bare branches.

Two other species from Asia are the purple beautyberry (*C. dichotoma*) and the Japanese beautyberry (*C. japonica*). Both produce loose clusters of violet fruits.

Late last year, the U.S. National Arboretum and Tennessee Technological University released a new beautyberry cultivar, *C. dichotoma* var. *albafructus* 'Duet.' The plant has variegated green leaves with yellow margins and clusters of small white fruits in late summer and autumn. Nurseries across the country are now testing and propagating the shrub. It should be available to gardeners in 2008.

The American beautyberry (*C. americana*) is native to the southeastern United States, parts of Mexico and the West Indies. The leaves are slightly larger than those of 'Profusion,' and the branch structure is more open. It grows three to eight feet tall and about six feet wide, and produces tight clusters of shiny lilac to violet fruits in autumn.

The American beautyberry may have greater value than just its good looks. Its leaves could help reduce human misery and disease, through their recently rediscovered ability to repel mosquitoes and ticks.

The investigation into the bug-blocking powers of beautyberry leaves started with a bit of old folk knowledge. A botanist working for the USDA's Agricultural Research Service (ARS) repeated to fellow scientists a story his grandfather had told him. The

grandfather, who farmed in northeastern Mississippi, recalled that people in the region would rub crushed beautyberry leaves on draft animals or place the leaves under animal harnesses to ward off biting insects. People sometimes used the crushed leaves on their own skin, too.

An ARS research team extracted natural compounds from American beautyberry leaves, then tested their capacity to repel mosquito species that spread yellow fever and malaria, and ticks that spread Lyme disease. One compound, callicarpenal, repelled mosquitoes and deer tick nymphs as effectively as the commercial repellent DEET. The USDA has applied for a patent on callicarpenal, but it must undergo toxicity trials before testing on humans can begin.

In a garden setting, beautyberries tolerate either full sun or light shade, but will produce heavier fruit clusters in full sun. The shrubs perform well in soil that is rich in humus, neutral to acidic in pH, moderately fertile and well-drained. They may need supplemental watering, especially in the first two years after planting and during summer dry spells. Diseases and pests are rarely a problem.

Beautyberries set flowers and fruit along the stems of the current year's growth. Pruning is not required, but to restrict the size of a shrub, head back long stems that grew the previous year. Perform pruning in late winter or early spring, when buds begin to swell. During extremely cold winters, stems sometimes die to the ground, but the shrub may grow back from the roots.

Beautyberry fruits are not edible for humans. Birds and other animals sometimes eat them, but they don't seem to be a preferred food source for wildlife in this region. The fruits usually persist on branches until at least the middle of autumn.

# **PHOTO CAPTION (Filename: Beautyberry):** In fall, beautyberry's fruit cluster delights the eye.



Photo credit: Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA SCS. 1991. Southern wetland flora: Field office guide to plant species. South National Technical Center, Fort Worth, TX.

#### **REFERENCES:**

### **Books**

- Everett, Thomas H. *The New York Botanical Garden Illustrated Encyclopedia of Horticulture*. New York: Garland Publishing, Inc., 1981. Vol. 2, pp. 561-62
- Sunset Western Garden Book, 6th Edition. Menlo Park, California: Sunset Publishing Corporation, 1995. P. 196

# **Internet Sources**

- USDA, Natural Resources Conservation Service. 2007. The PLANTS Database, PLANTS Profile: Callicarpa americana L. (<a href="http://plants.usda.gov/java/profile?symbol=CAAM2">http://plants.usda.gov/java/profile?symbol=CAAM2</a>, 31 July 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- Oregon State University Department of Horticulture. Landscape Plants: Images, Identification and Information (http://oregonstate.edu/dept/idplants/1plants.htm#callicarpa)
- Mosquin, Daniel. University of British Columbia Botany Photo of the Day. November 16, 2005: Callicarpa bodinieri var. giraldii 'Profusion' (www.ubcbotanicalgarden.org.potd/2005/11/callicarpa\_bodinieri\_var\_giraldii\_profusion.php)
- Royal Horticultural Society. Plant of the Month: October. Callicarpa bodinieri var. giraldii 'Profusion,' Award of Garden Merit.
   (www.rhs.org.uk/WhatsOn/gardens/rosemoor/archive/rosemoorpom03oct.asp)
- Elisabeth Carey Miller Botanical Garden. Great Plant Picks. Callicarpa bodinieri var. giraldii 'Profusion'
   (www.greatplantpicks.org/index.php?page=display&id=2299&searchterm=shrub &searchtype=committee)
- Pons, Luis. "Learning from our Elders: Folk Remedy Yields Mosquito-Thwarting Compound." USDA Agricultural Research Service (www.ars.usda.gov/is/AR/archive/Feb06/mosquito0206.htm)
- Pons, Luis. "Old-Time Mosquito Remedy May Work Against Ticks, Too." USDA Agricultural Research Service (<a href="www.ars.usda.gov/is/pr/2007/070126.htm">www.ars.usda.gov/is/pr/2007/070126.htm</a>)
- Carroll, J.F., Cantrell, C.L., Klun, J.A., M.H.2007. Repellency of two terpenoid compounds isolated from Callicarpa americana (Lamiaceae) against Ixodes scapularis and Amblyomma americanum ticks. Technical abstract. Experimental and Applied Acarology, published online
   <a href="mailto:(www.ars.usda.gov/research/publications/publications.htm?SEQ\_NO\_115=20374">(www.ars.usda.gov/research/publications/publications.htm?SEQ\_NO\_115=20374</a>
- USDA ARS. Patent Title: Natural Mosquito and Tick Repellent. (<a href="www.ars.usda.gov/research/patents/patents.htm?serialnum=11374866&pf=1">www.ars.usda.gov/research/patents/patents.htm?serialnum=11374866&pf=1</a>)

- Beltsville Agricultural Research Center e-Update, June 2007, p. 2. "New Beautyberry Cultivar to be Released"
   (www.ars.usda.gov/sp2UserFiles/Place/12000000/e-Update/e-update\_June07.pdf)
- U.S. National Arboretum. "Callicarpa dichotoma 'Duet': New Variegated Beautyberry Released from the Arboretum."
   (www.usna.usda.gov/Research/Callicarpa Release.html)
- Tumlinson, Ren. "Nature Trivia: The American Beautyberry Is a Common Shrub and Possible Mosquito Repellent." Henderson State University, Arkadelphia, AR. (www.hsu.edu/content.aspx?id=7337)

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This column is written by Washington State University/Skagit County certified Master Gardeners. Questions may be submitted to WSU/Skagit County Extension, 11768 Westar Lane, Ste. A, Burlington, WA 98233.