

Horticultural News and Research Important to American Gardeners

Franklinia Cross Yields Remarkable New Hybrid

Mountain schimlinia (x*Schimlinia floribunda*) is not a household word just yet, but it may well become one, at least among gardening folks. It is an intergeneric hybrid, the result of a cross between *Franklinia alatamaha* and *Schima argentea*, two members of the tea family.

Rare and less than robust, franklinia survived total extinction only through the efforts of the celebrated botanist John Bartram. Bartram discovered it in 1770 along the banks of the Altamaha River in Georgia; specimens were collected and propagated in the Bartram's Philadelphia garden. After 1803, franklinia was never again found in the wild.

In contrast, *Schima argentea* is a sturdy evergreen tree common in its native terrain of western China and Taiwan, where its adaptability and tolerance of varied site conditions have made it useful for reforestation.

Previous efforts to cross franklinia with members of related genera failed to produce robust offspring. Elwin Orton, professor of ornamental horticulture at Rutgers University, crossed

franklinia with *Gordonia lasianthus*, and William Ackerman, a retired research geneticist with the US National Arboretum in Washington, D.C., experimented with camellia crosses.

Recent phylogenetic studies revealed that *Schima* and

Franklinia are more closely related than the previously tested genera. This discovery inspired Thomas G. Ranney, a professor of horticultural science at North Carolina State University, to initiate controlled crosses between these plants. Using *S. argentea* collected in China by Clifford Parks, a retired professor of botany at the University of North Carolina, Ranney and colleague Paul R. Fantz were able to produce more than 80 hybrid seedlings. "Amazingly," says Ranney, "it worked!"



According to Ranney, the resulting seedlings are "floriferous, vigorous, and share characteristics of both parents." Don't expect to see the new hybrid available for a while; it will take a few years to propagate enough plants for the retail trade.

For more detailed information on Ranney's work, see *Hortscience*, Volume 38(6), October 2003.

THE BEAUTY OF PREPLANNED GARDENS

Preplanned gardens are "one of the biggest trends that we're seeing right now in gardening," says David Salman, president and chief horticulturist for High Country Gardens, a mail-order nursery in Santa Fe, New Mexico [(800)925-9387, www.highcountrygardens.com].

Professional designers assemble these collections of complimentary plants that thrive in the same growing conditions. For example, Lauren Springer's "Inferno Strip Garden," sold by High Country Gardens, includes tough beauties selected to survive in baking hot places.



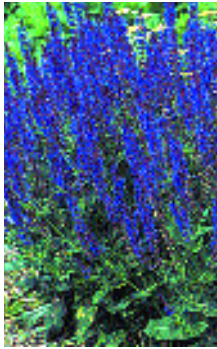
"Preplanned gardens take all the stress out of creating a new ornamental garden," says Salman.

Several other mail-order firms offer preplanned gardens. Bluestone Perennials in Madison, Ohio [(800) 852-5243, www.bluestoneperennials.com], has assembled a "Butterfly Garden." White Flower Farm in Litchfield, Connecticut [(800) 503-9624, www.whiteflowerfarm.com], sells both annual and perennial preplanned gardens.

High Country Gardens offers this preplanned "Cold Hardy Mediterranean Garden."

TAKING THE HEAT IN SOUTHERN CALIFORNIA

In Southern California, where the summer is bone dry for months, plants that are



Salvia leucantha

attractive and drought resistant receive high marks from homeowners and water agencies. Now fire departments are lauding some ornamental plants that are both drought and fire resistant, like the genus *Salvia*, endorsed in its entirety by the Los Angeles Fire Department.

Other good choices include shrub toyon (*Heteromeles arbutifolia*), the western redbud (*Cercis occidentalis*), and wild strawberry (*Fragaria chiloensis*).

Log on to www.bewaterwise.com to learn more about California-friendly ornamentals as well as planting and maintenance procedures that protect homes against fire.

SAVING THE BOX HUCKLEBERRY

Considered one of the oldest living plants, box huckleberry (*Gaylussacia brachycera*, USDA Zone 3–7, AHS Zone 7–1), a native of seven Mid-Atlantic states, has been listed as “critically imperiled.” Now, ARS (the Agricultural Research Service) and the United States National Arboretum are combining forces to both reintroduce this dwarf evergreen into the wild and encourage its use in gardens.

The common name refers to its small, leathery, boxwoodlike leaves, which are red when emerging in the spring and turn reddish bronze in autumn. Its pale pink, bell-shaped flowers are followed by edible dark blue berries. Box huckleberry grows between three and 12 feet tall and requires moist, well-drained, richly organic acid soil. One source is Roslyn Nursery, Dix Hills, New York (www.roslynnursery.com).

RUST-RESISTANT DAYLILIES SHINE

First observed in Georgia in 2000, daylily rust, caused by the fungus *Puccinia heme-rocallis*, has spread throughout the country. The disease produces raised orange or rusty-brown pustules on foliage, most prominent on the undersides. Infected

In Memorium: Dirck Brown

Children’s gardening and education advocate Dirck Brown passed away on December 30, 2003, at the age of 75 in Lexington, Virginia. Brown, who was raised in Ohio, earned a doctorate in education from Columbia University Teacher’s College and was a regular contributor to AHS’s Children and Youth Garden symposia. He and his wife, Molly, received the 2001 AHS Jane L. Taylor Award for excellence in children’s gardening for their development of a school curriculum, the Roots and Shoots Intergenerational School Garden Program, that involves young students with older community volunteers.

The Browns co-founded the Roots and Shoots program at Waddell Elementary School in Lexington, Virginia, in 1995. In the last 10 years, nearly every Waddell student has spent time in the classroom and garden with Dirck and Molly. Their school garden program has been nationally recognized as a model, and their curriculum has been distributed to other schools across the country.

leaves may die, and plants may become more susceptible to other pathogens or pests. Susceptibility varies widely among daylily cultivars.

After inoculating numerous daylily cultivars with the pathogen’s spores, plant pathologists at the University of Georgia evaluated the overall health and resistance of each. In two trials, using plants from Michigan, South Carolina, and Georgia nurseries, the plants’ resistance to rust was measured and rated numerically. Cultivars that showed no symptoms included: ‘Prairie Blue Eyes’, ‘Carolyn Criswell’, ‘Mardi Gras Parade’, and ‘Green Flutter’. Cultivars that displayed a high level of resistance were: ‘Woodside Ruby’, ‘Hush Little Baby’, and ‘Plum Perfect’.

PETER RAVEN TO RECEIVE RHS VEITCH MEDAL

Each year a select few are honored by the Royal Horticultural Society (RHS) for their “outstanding contribution to the advancement and improvement of the sci-



ence and practice of horticulture.” This year, Peter Raven, director of the Missouri Botanical Garden, is the only American among six recipients of the RHS’s silver Veitch Medal. Raven was described by *Time*

magazine as a “hero for the planet” because he champions research to preserve endangered plants and is an advocate for conservation, biodiversity, and a sustainable

environment. The Engelmann Professor of Botany at Washington University in St. Louis, Raven holds numerous offices, including president and chairman of the board of the American Association for the Advancement of Science. In 1996, he was recipient of the American Horticultural Society’s Liberty Hyde Bailey Award.

EAT CHOCOLATE, RESCUE A RAINFOREST

Go ahead! Have another piece of chocolate. It could help save the Brazilian Atlantic Forest, an endangered rainforest that contains the greatest number of tree species diversity recorded on Earth.

“Cocoa, the main ingredient in chocolate, is a high-value crop that can be grown under the rainforest canopy,” says Chris Bright, lead author of *Venture Capitalism for a Tropical Forest* and a researcher with the Worldwatch Institute, a Washington, D.C.-based non-profit.

Because cocoa is shade-tolerant, farmers don’t have to cut down the forest to grow it. Instead, in Brazil, cocoa can be grown in what is known as a cabruca system. The forest overstory is thinned, after which an understory of small cocoa trees are planted.

When a devastating cocoa fungus epidemic, combined with a drop in cocoa prices, occurred in the 1990s, many farmers abandoned cocoa production, transforming the cabruca for other uses. In addition to the reduction of forest habitat, this resulted in the loss of jobs for some 90,000 laborers.

The Worldwatch study suggests that with the availability of new, fungus-resis-

tant varieties, the cabruca system should be revived, with improvements—a strategy they call “forest cocoa,” which has both ecological and social goals. “The big opportunities here,” explains Bright, “are in the development of new cocoa products—new ways of connecting consumers to the forest and to the people who live there.” Not only will cocoa be produced under environmentally friendly conditions, the Atlantic Forest will be sustained, and more jobs will be available in rural areas.

MILK VERSUS MILDEW

When some of his begonias and gesnariads suffered from the fungal disease *Botrytis*, Keith Rogers of Mannum, South Australia, tried expensive fungicides to no avail. Then he concocted a milk-based spray similar to the kind used in the Australian grape industry. The results have been good.

“In the end, I settled for simple 10 percent whole milk (from powder is better) and 90 percent water,” says Rogers. “It works safely on my begonias, sinningias—all gesnariads.” It even worked

on some very delicate maidenhair ferns, says Rogers, but he cautions, “Some tropical *Adiantum* species do not like it.”

Unlike normal fungicides, which coat the plant to stop the spore from growing, “this stuff kills the fungal spore in its tracks,” says Rogers. He cautions using the milk-based spray around mycorrhizal-reliant plants because it may kill desirable fungi in the soil.

CONSERVANCY OPEN DAYS DIRECTORIES

The Garden Conservancy’s Open Days program enables gardeners a chance to do one of the things they enjoy most—snoop in other people’s gardens.



This year, in addition to a national edition of the *Open Days Directory*, the Conservancy has published four regional directories listing open days for some of the country’s best private gardens in the

Northeast, South, Midwest, and West.

The softcover books include detailed driving directions and vivid descriptions of each garden. The national edition costs \$15.95 (\$10.95 for Garden Conservancy members, plus \$4.50 for shipping) and \$5, plus \$1.95 for shipping, for each regional guide. Call the Garden Conservancy at (888) 842-2442 to order, or send a check to: the Garden Conservancy, P.O. Box 219, Cold Spring, NY 10516. The nominal fee for Open Days entrance is \$5 per garden.

PLANT LOCATOR FOR THE WEST

Live in the West? Need to find a source for a specific plant? *The Plant Locator® Western Region* by Susan Hill and Susan Narizny (Timber Press, 2004, \$19.95) lists 336 retail nurseries in Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and British Columbia, and more than 50,000 of the plants they carry. The book’s extensive index includes over 9,000 entries listing both common and botanical names.

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