

A Few New Plants

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Genetic diversity in the plant kingdom provides endless fascination for people who are intrigued with novelty and the potential to make use of it. For plant breeders, genetic diversity is the raw material we work with; what we mix and match and coax along to develop new and improved plants. We are always on the lookout for new plants with unusual and desirable traits – these become our building blocks or what we call “germplasm”. Germplasm collections provide the foundation for any plant breeding program and allow for the development of improved plants that have better adaptability, improved pest resistance, unique traits, and greater commercial appeal. Thus, plant exploring, collecting, trading, evaluating, and breeding all go hand-in-hand. Part of the fun of all of this is getting to know people along the way and sharing plants and stories. So, here are a few new plants (some from the wild and some from the lab) and the background behind them ...



Gordlinia grandiflora 'Sweet Tea' - Mountain Gordlinia

* *Gordlinia grandiflora* 'Sweet Tea' - Mountain Gordlinia. As if * *Gordlinia grandiflora* (a rare intergeneric hybrid between *Franklinia* and *Gordonia* – see reference below for more information), wasn't unusual enough, 'Sweet Tea' is a polyploidy form with extra sets of chromosomes. The result ... huge (5" diameter), showy flowers that look like big fried eggs. Semi-evergreen with large, single, camellia-like flowers from July through September. Why 'Sweet Tea'? Well, it's a member of the tea family, the flowers have a light sweet fragrance, and it comes from the South where sweet tea runs in our veins. Special thanks to Tony Avent of Plant Delights Nursery for coming up with the name – it took him no more than 10 seconds. Okay, it's not the toughest

tree on the planet, so give it a good site. More resistant to *Phytophthora* than *Franklinia* (see reference to article by Meyer et al. below), but it's still a bit persnickety. Best in full sun or a little afternoon shade as long as it's not too dry. Roots from stem cuttings in a matter of minutes, then takes off growing. Mature height is estimated to be 20-30'. Zone 7-10. Developed here at NC State. Not patented or trademarked. We have been sharing cuttings with folks so it should be popping up here and there.

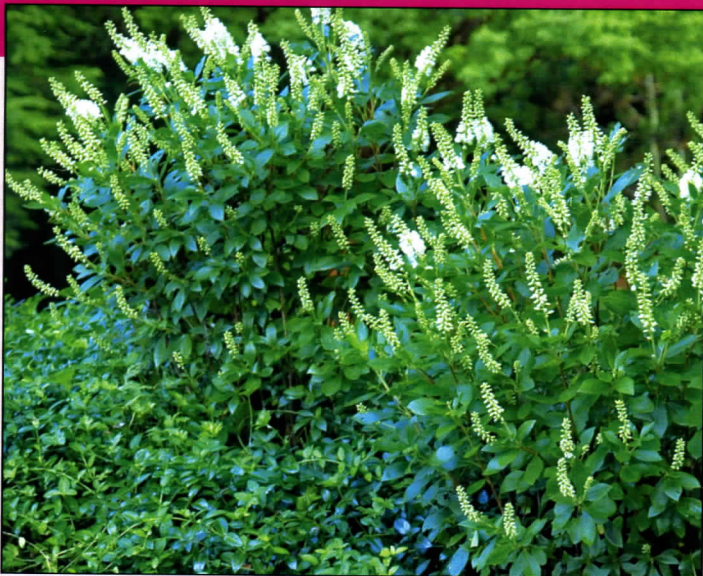
Meyer, E.M., T.G. Ranney, T.A. Eaker, and K. Ivors. 2009. Differential Resistance of *Gordonia* Trees to *Phytophthora cinnamomi*. *HortScience* 44(5):1484-1486. http://www.ces.ncsu.edu/fletcher/staff/tranney/meyer_et_al2009.pdf

Ranney, T.G., and P.R. Frantz. 2006. * *Gordlinia grandiflora* (Theaceae): An intergeneric hybrid between *Franklinia alatamaha* and *Gordonia lasianthus*. *HortScience* 41(6):1386-1388. <http://www.ces.ncsu.edu/fletcher/staff/tranney/xGordlinia003.pdf>.

Clethra alnifolia 'Crystalina' PPAF – Summersweet Clethra.

The late Fred Galle hit on something with his selection of a compact form of *C. alnifolia* named 'Hummingbird'. Reining in the height of Summersweet greatly expands the potential of this native shrub in modern landscapes. Although 'Hummingbird' was a breakthrough, it does tend to mature with a floppy habit and spreads by rather vigorous rhizomes. Selected here at NC State from a population of seedlings derived from an open pollinated 'Ruby Spice', 'Crystalina' provides a handsome improvement with a compact, round form maturing at around 3 feet high (somewhat taller in shade). Flowers are particularly showy with long, floriferous racemes. We are working with Spring Meadow Nursery to help market, license, and distribute 'Crystalina'. Liners are available.

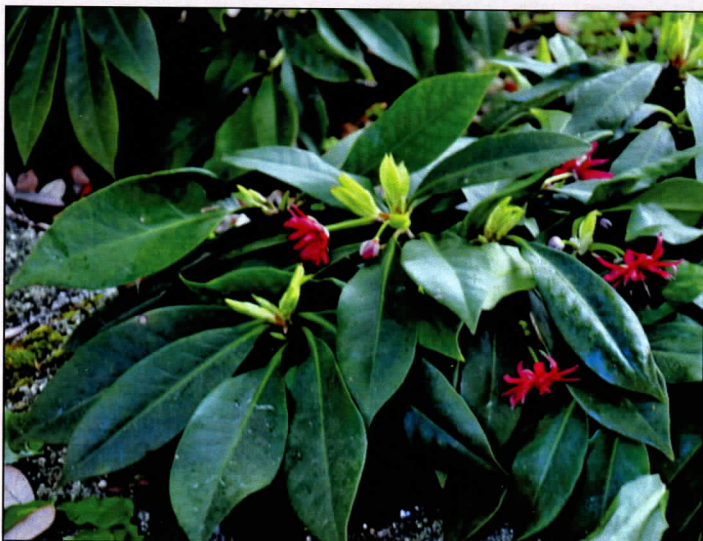
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Clethra alnifolia 'Crystalina' PPAF – Summersweet Clethra

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able from Spring Meadow and other licensed propagators. By the way, if you are a NC grower and want to purchase liners, Spring Meadow has reduced their minimum order to just 4 trays (128 plants). If you are a NC grower and want a license to propagate 'Crystalina', the minimum annual number of units has been reduced to just 200. Or, if you would rather, just purchase liners from a neighbor that has a license. A portion of the royalties comes back to NC State to support students and more plant breeding.



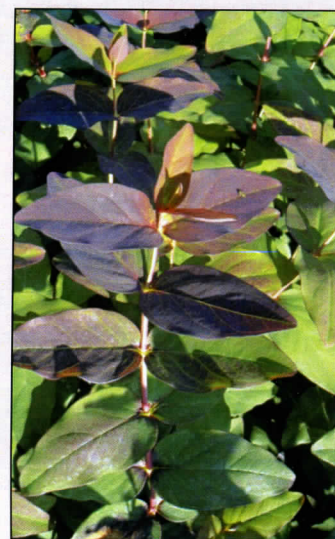
Illicium floridanum 'Swamp Hobbit'

Illicium floridanum 'Swamp Hobbit' - Florida Anise. Discovered by the intrepid plantsman, Dr. Ron Miller of Pensacola, FL. If you don't know Ron, or know of him, he is a retired professor of English literature (complete with a baffling vocabulary and propensity for obscure literary references) who just happens to be an exceptional plantsman and seems to know every nook, cranny, and plant in the swamps and outback of the

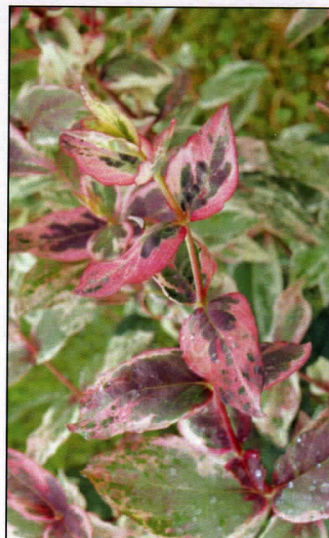
SE US. Although Ron prides himself as a non-commercial, botanical purist, some serious arm twisting by Rick Lewandowski, Fred Spicer, Clarence Towe, and I wore him down, and he agreed to name this unique find. 'Swamp Hobbit' is an incredible dwarf *Illicium floridanum* that Ron discovered in Coosa County, AL. Reaches 6-8" in height and a foot or so in breadth in 5 years. The original plant is about 2' tall, surrounded by a 5' circle of offsets. Leaves and flowers are of normal size; it just has particularly short internodes. Benefits from some shade. A native, shade-tol-



Hypericum androseamum 'Pollock'



Hypericum androseamum 'Matisse'



Hypericum androseamum 'Picasso' - Tutsan

erant, evergreen ground cover with showy flowers and good deer resistance. Few plants can make that claim. Has proven hardy in Delaware, so should be good in Zones (6?)7-10. Roots readily from stem cuttings, but somewhat slow in production. No patent or trademark. We have been sharing cuttings with folks so it should be getting around.

Hypericum androseamum 'Pollock', 'Matisse', and 'Picasso' - Tutsan. In some parts of the world, Tutsan can be a bit weedy, even invasive.

These 3 cultivars were bred and evaluated here at NC State University as part of our efforts to develop new, non-invasive nursery crops. What might not be apparent by looking at them is that they all have 3 sets of chromosomes (triploids), not 2 (diploids). As a result, they are seedless, non-invasive, forms of Tutsan. Special credit goes to

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Richard Olsen (former Ph.D. student, now at the US National Arboretum) and Clara Trueblood (former M.S. student, now at the Phipps Conservatory and Botanical Gardens) for their efforts on this project. These new abstract/expressionistic Tutsans include: 'Pollock' – dripped and splattered with green and white variegation; 'Matisse' – infused with a bold purple blush; and 'Picasso' – a neo-expressionistic integration of surreal colors and abstract patterns. Other characteristics are typical of the species. No patent or trademarks. We have plants and cuttings to share. If you have academic leanings, you can read more at:

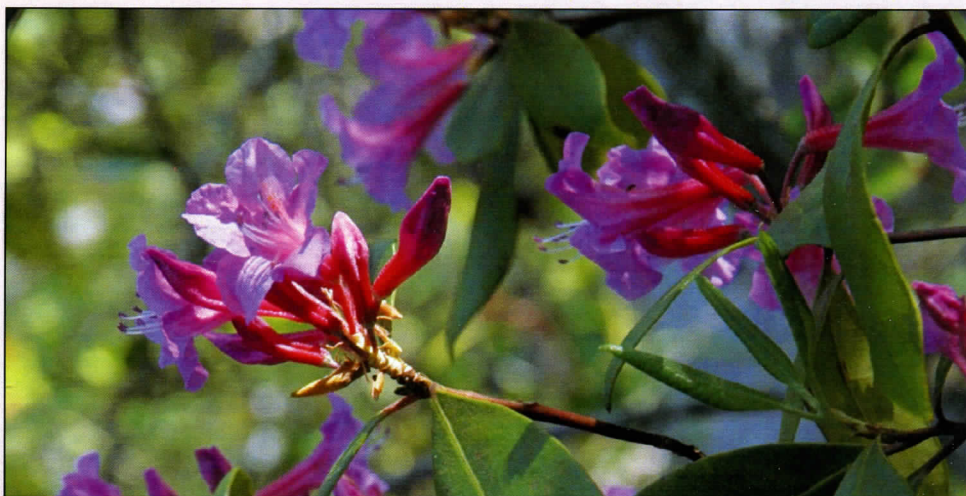
Olsen, R.T., T.G. Ranney, and D.J. Werner. 2006. Fertility and inheritance of variegated and purple foliage across a polyploid series in *Hypericum androsaemum* L. J. Amer. Soc. Hort. Sci. 131(6):725-730. <http://www.ces.ncsu.edu/fletcher/mcilab/publications/olsen-et-al-2006c.pdf>

Trueblood, C.E., T.G. Ranney, N.P. Lynch, J.C. Neal, and R.T. Olsen. 2010. Evaluating fertility of triploid clones of *Hypericum androsaemum* L. for use as non-invasive landscape plants. Hortscience 45(7):1026-1028. <http://www.ces.ncsu.edu/fletcher/mcilab/publications/trueblood-et-al-2010.pdf>



***Weigela florida* 'Sunset' PPAF – Weigela**

***Rhododendron minus* var. *minus* 'Southern Cerise' - Piedmont Rhododen-**



***Rhododendron minus* var. *minus* 'Southern Cerise'**

dron. While botanizing from Ron's jon boat on Gantt Lake in Southeastern Alabama, Ron Miller, Clarence Towe and I came upon this exceptional southern form of *R. minus* with vivid pinkish-red (i.e., cerise) flower buds and tubes that open with bright, pinkish-violet petals. Compared with *R. minus* var. *chapmanii*, another southern form of *R. minus*, 'Southern Cerise' has much showier flowers, lusher foliage, and a less rangy habit. Heat tolerance is a given based on its provenance (within 30 miles of the Florida border). Definite potential for breeding programs. We have a few cuttings to share for those who may be interested. No patent or trademark.

***Weigela florida* 'Sunset' PPAF – Weigela.** Looking for dramatic color in a compact, perennial shrub? Well, give 'Sunset' Weigela a try. Developed here at NC State, 'Sunset' provides unique variegated foliage with green centers and multicolored margins ranging from and including ivory yellow, yellow, yellow-green, green, and red depending on age of foliage and time of year. The habit is compact and reaches approximately 15" high and 25" wide. Flowers are a light pink. Good in full sun to part shade with adequate water. Other than that, it's what you would expect from a Weigela. Currently available through Spring Meadow Nursery and other licensed propagators. Same terms as listed for *Clethra* 'Crystalina'.



***Exochorda* 'Blizzard' PPAF – Pearlbush**

***Exochorda* 'Blizzard' PPAF – Pearlbush.** Considered old-fashioned by some, Pearlbushes are tough, dependable plants that explode with pearl-like buds and frilly petals at the hint of spring, giving Forsythias a good run for their money. 'Blizzard' takes Pearlbush to a new level – a tetraploid hybrid that combines *E. serratifolia*, *E. racemosa*, and *E. korolkowii* in its pedigree. Unlike many Pearlbushes (e.g., 'The Bride') that can resemble a tangled cascading brush pile, 'Blizzard' has a distinct upright to rounded form with a mature height and width of 3-4 feet that makes a refined shrub or small tree. 'Blizzard' is extremely floriferous with flowers that can be twice as large as other Pearlbushes. Developed here



***Clerodendrum trichotomum* 'Betty Stiles' – Harlequin Glorybower**

at NC State. Currently available through Spring Meadow Nursery and other licensed propagators. Same terms as listed for *Clethra* 'Crystalina'.

***Clerodendrum trichotomum* 'Betty Stiles' – Harlequin Glorybower.** Back when I was going through a *Clerodendrum* phase, experimenting with various interspecific hybridizations (none

of which worked), Hollis Wild of Appalachian Trees mentioned that there was a particularly nice Harlequin Glorybower growing up in her neck of the woods (Glendale Springs, NC) that was perfectly cold hardy and formed a nice tree. We rooted some cuttings and have been impressed with it ever since. As a species, *Clerodendrum trichotomum* has a lot going for it - tough and adaptable with exceptional showy, fragrant flowers that bloom throughout the summer followed by showy metallic-looking blue fruit. It's sometimes hard to see our tree when it's blooming with the thick cloud of butterflies enveloping the canopy. However, as Mike Dirr mentions, Harlequin Glorybower often has the appearance of "an overturned Dempster Dumpster" and it's rare to find good, cold hardy tree forms. 'Betty Stiles' fits the bill. Hollis recommended naming the tree after her neighbor, Betty Stiles, who first recognized the merits of this tree and started

sharing it with her friends and neighbors. One additional bit of advice, if you know *Clerodendrum trichotomum*, you are probably aware that it can sucker from the roots much like a *Rhus*. A good way to prevent this is to plant it in a lawn area where any suckers are mowed off or use it in a planter. Not patented and cuttings are available from our tree in Mills River.

More new plants are on their way. Thanks very much to the NCNLA, Spring Meadow Nursery, J. Frank Schmidt Family Foundation, USDA Floral and Nursery Crops Research Initiative, and NC State University for supporting these efforts. Thanks also to Tom Eaker, Joel Mowrey, Nathan Lynch, Jeremy Smith, Darren Touchell, and the staff at the Mountain Horticultural Crops Research Station for all of their efforts collecting, propagating, breeding, evaluating, and distributing these plants. And, special thanks also to Ron Miller, Clarence Towe, Hollis Wild, and Betty Stiles for sharing their plants and stories.