

scenario must be tempered by the current weakness of the U.S.A. economy, cuts in Federal tax rates, and a possible war in the Middle East. Should the Initiative's budget increase in the future, one priority for the new or redirected funds will probably be augmenting research on environmental and resource management practices and strategies.

At present, the Initiative supports research focused largely on challenges to floral and nursery production in the Pacific Northwest, the Mid Atlantic and Northeastern states, and the Southeastern U.S.A. In the future, the Initiative's geographical focus will likely broaden to address more vigorously the challenges facing the green industry in the North Central U.S.A., and U.S.A. subtropics and tropics. Finally, with Initiative funding now entering its 5th year, we expect an increased pace and volume of new research discoveries that lead to, or are accompanied by, solutions to the most pressing challenges facing the U.S.A. floral and nursery industry.

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New Plant Forum[®]

Compiled and Moderated by Jack Alexander

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Camellia ×williamsii 'Aida'
Clivia miniata var. *citrina* 'Sir John Thouron'
Corylopsis glabrescens 'Longwood Chimes'
Ilex ×attenuata 'Longwood Gold'
Ilex opaca 'Longwood Gardens'
Ilex serrata 'Longwood Firefall'
Magnolia acuminata var. *subcordata* 'Peirce's Park'
Wisteria frutescens 'Longwood Purple'

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Woodside Nursery, Bridgeton, New Jersey 08302 U.S.A.

Hemerocallis 'The Jury's Out'

Fred Bauer

Phytotektor, Huntland, Tennessee 37345 U.S.A.

Euonymus alatus cv., Little Moses[™] dwarf burning bush, PP13168

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Baptisia 'Carolina Moonlight'
Phlox divaricata 'Blue Moon'
Sarracenia leucophylla 'Tarnok'

Andy Brand

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Ilex verticillata 'Sunsplash'

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Geranium maculatum 'Espresso'
Panicum amarum 'Dewey Blue'
Spigelia marilandica

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Hawksridge Farms, Hickory, North Carolina 28602 U.S.A.

Caryopteris divaricata 'Snow Fairy'
Loropetalum chinense 'Daruma'
Trachelospermum asiaticum

Angela Treadwell-Palmer

Chicagoland Grows, Glencoe, Illinois 60022 U.S.A.

Ulmus 'Morton', Accolade™ hybrid elm
Viburnum trilobum 'J.N. Select', Redwing™ American cranberry
bush viburnum

Tom Ranney

North Carolina State University, 455 Research Drive, Fletcher, North Carolina 28732 U.S.A.

Betula nigra 'Summer Cascade'

Brian Upchurch

Highland Creek Nursery, Fletcher, North Carolina 28732 U.S.A.

Acer rubrum 'Sum Red', Summer Red™ red maple
Chionanthus virginicus 'Emerald Knight'
Sinojackia xylocarpa 'Linda Carol'

Tom Ward

Arnold Arboretum, Jamaica Plain, Massachusetts 02130 U.S.A.

Indigofera pseudotinctoria 'Rose Carpet'

Plants:***Acer rubrum* 'Sum Red', Summer Red™ red maple**

'Sum Red' is a selection made by Bob Head, Head-Lee Nursery, Seneca, South Carolina. The outstanding ornamental feature is the emerging brick-red foliage evident throughout the growing season. This red new growth contrasts quite nicely with the dark green mature foliage. The habit and growth rate is typical of the species; however the fall color is a nice yellow, which is not typical of the species. 'Sum Red' roots readily from summer softwood cuttings. Terminal cuttings are treated with 2500 ppm.

***Baptisia* 'Carolina Moonlight'**

'Carolina Moonlight' is a cross between two of our native baptisias; white wild indigo, *B. alba*, and the yellow wild indigo, *B. spherocarpa*. The resulting offspring is a blend of the best qualities of each of its parents and exhibits great hybrid vigor. Clear yellow pea-like flowers rise well above grayish-green trifoliate leaves on erect flower spikes in April and May in Chapel Hill, North Carolina. Flowering begins as foliage is developing and continues for almost a month. As many as 40 to 50 spikes can be produced on a mature plant. Flower spikes of 'Carolina Moonlight' exhibit a strong vertical form when in bloom. The foliage develops into a dense, rounded shrub-like shape as it matures. 'Carolina Moonlight' grows to 4.5 ft tall and 4 ft wide at maturity. It is insect and disease resistant.

It prefers a sunny location with moderately well-drained soil. Hardy in USDA Zones 4-9. 'Carolina Moonlight' was jointly introduced to the trade in the spring of 2002 by North Carolina Botanical Garden, Niche Gardens, Plant Delights Nursery, Wayside Gardens, and Shady Oaks Nursery. Selected by Rob Gardner.

***Betula nigra* 'Summer Cascade' (PPAF).** 'Summer Cascade' is a new, weeping form of our native river birch that has a unique, pendulous habit with graceful arching branches. The attractive form of this tree makes it ideal for use as a specimen tree or focal point, particularly with water features. Other uses include group plantings or creative design elements.

Typical of river birch, 'Summer Cascade' has been found to be extremely adaptable and tolerates a wide range of growing conditions including high temperatures and wet soils. Growth is best at pH < 6 with moderate fertility and ample water. As with other river birches, 'Summer Cascade' is expected to have excellent resistance to bronze birch borer and good resistance to birch leaf miner.

Growth rate is fast. A 6-ft-tall branched tree can be produced in one growing season from a rooted cutting. When grown free-form, the habit is typically a mounded shrub with successive layers of arching branches. Alternatively, it can be staked or trained to an attractive tree form of undetermined height.

Softwood stem cuttings easily propagate 'Summer Cascade'. Terminal and sub-terminal cuttings, from firm wood, can be rooted in high percentages (>95%) when treated with 3000 to 5000 ppm indolebutyric acid in 50% isopropyl alcohol.

'Summer Cascade' was discovered by John and Daniel Allen at Shiloh Nursery in Harmony, North Carolina, and is being released as a joint introduction by Shiloh Nursery, North Carolina State University, and North Carolina Foundation Seed Producers. Parties interested in propagating this tree can contact Thomas

Ranney, Professor of Horticultural Science, Department of Horticultural Science, North Carolina State University, Mountain Horticultural Crops Research and Extension Center, Fletcher, North Carolina, 28732. Phone: 828-684-3562. Email: tom_ranney@ncsu.edu.

***Camellia* × *williamsii* 'Aida'**

A seedling from a cross between *C. japonica* 'Ville de Nantes' and *C. saluenensis* 'Dogrose', received from Dr. Clifford Parks around 1968. Selection made by Dr. Robert Armstrong in 1974. Distributed to Camellia Forest Nursery and offered in their catalog in 1995. Named by Dr. Robert Armstrong.

***Caryopteris divaricata* 'Snow Fairy'**

'Snow Fairy' is a Zone 6 to 9 herbaceous perennial with broad white margins on all of its leaves. Does not burn in full sun. Ted Stephens at Nurseries Carolinian in North Augusta, South Carolina has grown it for several years and has seen temperatures at 98°F with no burn. Attains a height of 2 ft by 3 ft wide. Wispy blue flowers cover it in the fall in terminal panicles. Propagates easily in the early to mid summer from softwood cuttings. Use KIBA at 3000 ppm. This should root easily with almost any hormone.

***Chionanthus virginicus* 'Emerald Knight'**

This selection was made from a group of seedlings at Highland Creek Nursery. It is a male form with extremely dark, shiny green foliage. The habit tends to be more tree-like than shrubby. It is quite vigorous and may grow 2 to 3 ft per season. I have had some luck rooting cuttings, but not in economical percentages, and they don't seem to grow off as quickly as grafted plants. Summer softwood cuttings were treated with 5000 ppm KIBA and put under mist until rooting, which took approximately 6 weeks. The percentages were rather low, perhaps 20% to 30%. Winter grafting works quite well. Scions are grafted onto seedling *C. virginicus* in January and 90% take can be expected. Summer budding is also a possibility. Fall foliage is yellow, typical of the species.

***Clivia miniata* var. *citrina* 'Sir John Thouron'**

Received from Sir John Thouron in 1988. Distributed to White Flower Farm around 1993 and offered in their catalog soon after that. First 36 plants were sold by that nursery at a price of \$950 each. Awarded PHS ribbon to the highest scoring blue ribbon entry in 1999 Philadelphia Flower Show when exhibited by Mrs. Lammont duPont Copeland.

***Corylopsis glabrescens* 'Longwood Chimes'**

This plant was grown from the seed collected in 1983 by Dr. Clifford Parks, of the University of North Carolina in Chapel Hill, on the Ebino Highland in southern Kyushu. Dr. Parks shared the seed with the U.S. National Arboreum, which later sent several plants to Longwood. Plants at the U.S.N.A. did not perform well and were discarded but one plant at Longwood turned out to be truly special. This clone has flowers about 50% larger and inflorescences about 50% longer than what is typi-

cal for this species. Flowers are wide open, very showy, pale yellow, and extremely fragrant. They open about 2 weeks later than other *Corylopsis*, therefore are less prone to late freeze injury. It is a medium-size shrub with elegantly spreading branches. The cultivar name was registered in 1999.

***Euonymus alatus* cv., Little Moses™ dwarf burning bush**

Discovered growing on his nursery in Tennessee by Mr. Jack Odom of Odom Nursery some 18 years ago. A sport of *E. alatus* 'Compactus'. It has just been introduced to the nursery trade by Odom Nursery.

Little Moses™ dwarf burning bush has a very compact slightly spreading growth habit and is hardy to Zone 4. Mature 17-year-old plants are now only 42 inches to 48 inches high which can sucker profusely from the base. Full sun to partial shade and prefers a loam soil but will grow in sandy as well as clay soil; do not fertilize it with high nitrogen fertilizer. It has excellent brilliant red fall color. Patent royalty is \$.30 cents per plant for licensed growers only.

***Geranium maculatum* 'Espresso'**

We are very excited to offer our own selection from the woods of Landenberg, Pennsylvania. It has pale pink flowers and very attractive red-brown foliage. A bold new look for our native geranium! The species is found in open woods throughout the Eastern U.S.A. It grows in partial shade in average to moist soil with good drainage. It should be grown in a mix with good drainage in full sun or part shade. Smaller flowers than 'Elizabeth Ann', but bolder foliage that lasts all summer more than makes up for the difference.

***Hemerocallis* 'The Jury's Out'**

I bred and introduced this cultivar in 2001. It has been distributed to several daylily specialty nurseries and wholesale operations, among them Centerton Nursery in New Jersey and Stauffers of Kissel Hill in Pennsylvania. It has several important qualities that set it apart from other daylily introductions: (1) it starts blooming the first week of August in the mid-Atlantic States when most other daylilies stop blooming, (2) it is extremely vigorous with 7-way branching and up to 60 flower buds on each stalk (scape), (3) it usually reblooms to extend the blooming period into the first 2 weeks of September, (4) and, it is easily propagated with proliferations (new plants) that are formed on the flower stalks. Although it appears spider-like in flower form, it does not have the 1 : 5 petal length to width ratio required for this category. Its parents are 'Final Touch' × 'Slim Pickings'. This cross was made to explore the extremely long blooming period of 'Final Touch' (late July to late September) and the vigor and high bud count of the mid-season 'Slim Pickings'. I think you will find that this daylily cultivar, 'The Jury's Out' is an important asset to that difficult growing month of August.

***Ilex xattenuata* 'Longwood Gold'**

This is small evergreen tree, reaching about 15 ft in height and 6 ft in width at the age of 20 years. Growth habit is dense, regular, and conical fruit is yellow. The original plant has been growing at Longwood Gardens since early 1970s, when the

open-pollinated seed was received from the Morris Arboretum. It was selected in 1976, as the only yellow-berried plant found among the red-berried seedlings. Over the period of more than 20 years at Longwood (U.S.D.A. Zone 6b), this plant showed superior cold tolerance compared to other selections of *I. xattenuata*. This cultivar was named in 1998 and registered the same year.

***Ilex opaca* 'Longwood Gardens'**

Found in the wild in North Carolina and delivered to Longwood in mid 1930. As the plant was widely admired, Pierre du Pont made cuttings available to the nurseries in the region. Plants were offered by Upper Bank Nursery in 1957, and more recently by Fairweather Gardens and Louisiana Nursery. Described in Fred Galle's book *Hollies, The Genus Ilex*.

***Ilex serrata* 'Longwood Firefall'**

This plant was brought from Japan on a joint trip by Longwood Gardens and the U.S. National Arboretum in 1985. It was selected based on its semi-pendulous growth habit. It has been grown in Longwood nursery for past 17 years and proved to be a valuable plant. Its fruit characteristics are similar to a typical form of *Ilex serrata*, but distinct growth habit offers new possibilities for its use in the landscape. Daring propagators may want to explore grafting this plant onto a high standard for yet different visual effect. Cultivar name was registered in 1998.

***Ilex verticillata* 'Sunsplash'**

'Sunsplash' was found by John Dancher in 1996 as a branch sport on a female *I. verticillata* growing in Hamden, Connecticut. The striking feature of this selection is the dark green foliage irregularly splashed with yellow. A single plant will typically possess both solid green leaves and entirely yellow leaves, but most of the foliage displays some combination of green and yellow. The amount of variegation tends to be greater on early and late season growth. New growth produced during hot summer temperatures may be mostly green. Abundant orange-red fruit ripen in September creating a stunning contrast with the variegated leaves. Growth habit is typical for the species with mature plants growing 6 to 8 ft tall. Plants can easily be produced by softwood cuttings.

***Indigofera pseudotinctoria* 'Rose Carpet', rose carpet indigo shrub**

The origin of this plant is from the Arnold Arboretum 1977 seed-collecting trip to Korea and Japan by S.A. Spongberg and R.E. Weaver. The seed was collected from a cultivated plant at the Chollipo Arboretum in Korea. A percentage of the seedlings produced from this seed lot were distributed. One of the recipients was Polly Hill at Barnard's Inn Farm, Martha's Vineyard, Massachusetts. In 1982 we, in turn, received from Polly Hill a plant that she had selected from seedlings grown from the original seedlings we sent her in 1977. This plant represents a very prostrate form of *I. pseudotinctoria*. It was named by Polly Hill 'Rose Carpet'. This low-growing shrub as a species is native to China, Taiwan, and Japan. Known for its heat and drought tolerance this small plant has done very well in the difficult summers we have had lately at the Arnold Arboretum.

Growing 10 to 15 inches in height and 2 to 3 ft across, this ground cover shrub is well suited for the front of a perennial border, as an edging plant or even cascading over a rock wall. The dark green foliage is delicate in appearance throughout the growing season and turns a pale yellow in the fall. The rose-pink, pea-shaped blossoms, begin to open and cover the plant in midsummer. There is often scattered bloom until the first frost. It prefers full sun and soil that is well drained. It will provide a bright spot in the garden for many years; Zone 4 in hardiness.

Propagation of 'Rose Carpet' can be done either by seed or softwood cutting. Seeds have an impermeable seed coat and need a warm water treatment to imbibe. The technique that we use at the Arnold is what we call the Mr. Coffee treatment. We place the seeds into a coffee cup and allow the warm water heated in the coffee maker to fill the cup. A 24-h soak in this water and they are ready to be sown. 'Rose Carpet' does come true from seed. Softwood cutting stuck in mid-June root well with a mild hormone (1000 IBA talc or solution) under mist.

***Loropetalum chinense* 'Daruma'**

Loropetalum is and will continue to be a much used plant in the Southern U.S.A. There are many cultivars now being sold, however there is not a good dwarf form on the market. Hopefully, this plant will prove to be one.

'Daruma' is a Zone 7 to 9, dwarf form recently brought back from Japan. It appears to attain a height of around 2 ft and spread of 3 ft. Burgundy foliage, smaller leaves than many of the other burgundy cultivars with the same typical pink flowers as most of the other dark-leaved forms. We observed many new forms of *Loropetalum* from seedlings while visiting there the last few years. Propagates easily from softwood to slightly firm cuttings in summer. Use 3000 ppm KIBA mid to late summer or 5000 ppm if stuck later in the year.

***Magnolia acuminata* var. *subcordata* 'Peirce's Park'**

This is a large, 90-ft-high, deciduous tree with yellow flowers opening at the time of leaf emergence. The name commemorates Joshua and Samuel Peirce, who shortly before the turn of the 18th century created an arboretum, which later became a nucleus of today's Longwood Gardens. Among trees planted by Peirce brothers was *M. acuminata* var. *subcordata*, originally discovered in 1788 by a French explorer Andre Michaux in South Carolina. After two centuries this tree is still standing at the site of the previous arboretum. Today Longwood's tree is a national champion of this variety. This clone was given a cultivar status because of its historical importance. The cultivar name was registered in 1998.

***Panicum amarum* 'Dewey Blue'**, Dewey blue bitter panicgrass

This smooth, blue tinted grass can grow as tall as 3 ft and spreads slowly through its rhizome-growth-habit forming clumps. The flowers are airy, emerging in the fall, and persisting as a light beige color throughout the winter. Native along the shores from Louisiana to Connecticut. It is adapted to dry, sterile locations where it plays an important role in stabilizing these areas. For example bitter panicgrass is very commonly used in dune erosion control. Bitter panicgrass grows best in full sun in dry, well drained soils. This is a low maintenance landscape plant, however because of its size and rhizomatous growth habit, adequate space is essential. Bitter panicgrass is commonly found on high dunes and plays an important role in dune stabilization.

***Phlox divaricata* 'Blue Moon'**

Bill Cullina, nursery manager at New England Wildflower Society, selected this native phlox for its dark-blue, fragrant flowers with very full flower petals. Woodland phlox is a great spring bloomer; this is the best selection Kim Hawks, Niche Gardens, Chapel Hill, North Carolina has seen thus far suggesting good garden performance from New England to the North Carolina piedmont. Grow in light open shade, in areas that are regularly irrigated. It can take more sun and will grow fuller in the sun than in deep shade. 'Blue Moon' is an easy-care groundcover that only needs a light shearing of the faded blossoms to tighten it up for the rest of the season. Height 12 inches. Spread 14 to 16 inches. U.S.D.A. hardiness Zone 4 to 8. Available from Niche Gardens.

***Sarracenia leucophylla* 'Tarnok'**

In Carriere, Mississippi, Coleman and Frieda Tarnok have bog fields in full bloom. Coleman's "prize" is a double-flowered pitcher plant. Numerous curled flower petals of light green and burgundy overlap and form a full ball of color. Handsome lettuce-green leaves transform to milky-white wavy hoods etched in burgundy veins. Grows 2 to 3 ft tall in sunny bog areas. Hardy U.S.D.A. Zones 4 to 9. Available in tissue culture from Agristarts in Florida.

***Sinojackia xylocarpa* 'Linda Carol', Linda Carol weeping jacktree**

This pendulous form of jacktree was discovered as a chance seedling at Highland Creek Nursery. The parent plant, now roughly 6 years old, is 5 ft tall by 4 ft wide with strongly cascading branches. The weeping tendency seems to be more pronounced each year. It roots readily from softwood cuttings in June through August. Cuttings treated with 2500 ppm KIBA will produce excellent results. If taken early and fertilized after rooting, the plants will continue to grow. I generally overwinter them in a minimal heat house and pot up the following spring. Fall color is a bright yellow, typical of the species.

***Spigelia marilandica*, Indian pink pinkroot**

Bushy, compact plants with medium green lance-shaped leaves are topped with very showy deep-red firecracker flowers with yellow throats in May and June. A very hardy plant, though it is best planted by the end of July for reliable success in gardens and containers. Occurs in wooded borders, shaded creek valleys, and dry open woods throughout the Eastern U.S.A.

Grow in partial to full shade in rich soil with high organic content. A very hardy plant, though it is best planted by the end of July for reliable success in gardens and containers. Prefers not to be transplanted once established.

Grow in a mix with good drainage in partial shade (30%-50%). Pot up by the end of June for best results.

Spigelia marilandica is a Southeastern North American native perennial herb, found in rich woods from New Jersey to Florida and west to Texas and Wisconsin, primarily in the Southern States. Indian pink is fast disappearing, due to over harvesting. Cultivation: a very ornamental plant, Indian pink succeeds in most fertile soils in semi-shade, transplant root cuttings in rich well drained soil. The leaves are pointed, stemless, alternate and opposite growing from 2 to 4 inches long, and up to

3 inches wide. The showy flowers are tube-shaped, bright scarlet red outside, opening into a bright yellow five-pointed star; flowers bloom from May to July atop a smooth simple erect stem from 6 inches to 2 ft high. The roots are rhizomes, knotty and dark brown externally, with many thin, long, wiry rootlets attached to them, marked with scars of the stems of former years; internally the rhizome is whitish, with a darkbrown pith. Collect rootstock, after the flowers fade. The root is best used when fresh but can be harvested in the autumn then dried for herb use.

Trachelospermum asiaticum

A groundcover hardy in Zones 7 to 9, this cultivar is possibly 'Ogon Nishiki' but not entirely positive about this. This is another acquisition from Japan with striking new growth of almost a burnt-orange color. Rest of the foliage is bright yellow with a green margin. A plant our group coveted the first year visiting Japan and was able to acquire last year. Propagates easily from softwood cuttings in early to mid summer, use 3000 ppm KIBA.

***Ulmus* 'Morton', Accolade™ elm**

This elm was selected from the collections of The Morton Arboretum, Lisle, Illinois, for its graceful vase-shaped habit, vigorous growth rate, dark green glossy foliage, excellent disease and pest resistance, excellent drought tolerance, and good yellow fall color. The parent tree, known to be a hybrid of *U. japonica* × *U. wilsoniana*, measures 60 ft in height with a 40 ft spread. This clone originated from seed distributed in 1924 by the Arnold Arboretum, Boston, Massachusetts.

***Viburnum trilobum* 'J.N. Select', Redwing™ American cranberry bush viburnum**

This viburnum was selected by Johnson's Nursery, Menomonee Falls, Wisconsin, for its good form, good growth rate and attractive red-tinted new foliage. Handsome white flowers appear in mid- to late May, followed by ornamental clusters of persistent, bright red fruit from late fall into early winter. Fall foliage color varies from bright red to wine-red. This selection has been verified by Dr. Edward R. Hasselkus from the University of Wisconsin, Madison, as a true *V. trilobum*, not a hybrid, as with other cultivars in the trade. The plant matures at 8 to 10 ft in height with a 6 to 8 ft spread.

***Wisteria frutescens* 'Longwood Purple'**

Source unknown but grown at Longwood since before 1950s. Described as a form with the deepest purple flowers. Pictured in Peter Valder's book *Wisterias, A Comprehensive Guide*. Distributed to Nurseries Caroliniana and offered in their catalog in 2000 (accession L.0615). Named by Ted Stephens of Nurseries Caroliniana.