

New Plant Forum

Compiled and moderated by Jack Alexander.

PRESENTERS:

Carlo Belgiorno, Belgiorno Nursery, Central Islip, Long Island, New York.
Pieris japonica 'Sweetwater'®

Susan E. Bentz and **Ruth Dix**, U.S. National Arboretum, Washington, D.C.
Ulmus 'Frontier'
Ulmus parvifolia 'Pathfinder'
Ulmus wilsoniana 'Prospector'

Vern Black, Bailey Nurseries, St. Paul, Minnesota
Rosa 'Winnipeg Parks'

Bruce Briggs, Briggs Nursery, Olympia, Washington.
Rhododendron 'P.M.A. Tigerstedt'
Rhododendron 'Consolini's Windmill'

Susan Milliken, Kate Brook Nursery, RD#1 Box 2025, Wolcott, Vermont 05680.
Pinus strobus 'Louie'
Picea abies 'Perry's Gold'

David Schmidt, Royal Botanical Gardens, Hmilton, Ontario.
Iris sibirica 'Red Royale'
Iris sibirica 'Sapphire Royale'

Kim E. Tripp, Arnold Arboretum, 125 Arborway, Jamaica Plain, Massachusetts 02130.
Cephalotaxus koreana
Thuja 'Giganteoides' (syn. *T. occidentalis* 'Gigantea', 'Giganteum', 'Giganticum')

Matthew J. Vehr, Spring Grove Cemetery and Arboretum, Cincinnati, Ohio
Cornus florida 'Spring Grove' Plant Patent #8500
Cornus mas 'Spring Sun'

Nancy Vermeulen, Vermeulen & Son, Neshanic Station, New Jersey
Acer palmatum 'Red Feather'
Tsuga canadensis 'Vermeulen's Wintergold'

Tom Ward, Arnold Arboretum, Jamaica Plain, Massachusetts
Pseudolarix amabilis

Michael Yanny, Johnson's Nursery, Menomonee Falls, Wisconsin.
Fraxinus pennsylvanica 'Johnson', Leprechaun™ green ash. PPAF

***Acer palmatum* 'Red Feather'**

In the mid 1980s our mother 'Burgundylace' bore a delightful offspring, a red head like herself, but very petite and extremely delicate. We've watched her mature with consistently fine features and feel she is now ready to go out into the world.

'Red Feather' makes up faster and fuller than 'Red Filigree Lace' without manipulating it to do so. The leaves are just as fine but the color is a bit more subtle,

almost smokey. The branches layer attractively and the leaves feather out all over the plant. Discovered by former manager, Ronald Byleckie.

***Cephalotaxus koreana* (syn. *C. harringtonia* var. *koreana*)**

Cephalotaxus, plum yew, continues to gain attention as a handsome evergreen, needled conifer unique in its combination of deer resistance and diverse adaptability. Most attention to date has focused on cultivars of *C. harringtonia*, Japanese plum yew, because they have been the most widely available *Cephalotaxus*. However, there are other species of *Cephalotaxus* with great promise for nursery and landscape production and use. *Cephalotaxus koreana*, Korean plum yew, merits special attention among *Cephalotaxus*. It is a relatively dense, upright, shrubby plant with black-green, very glossy, coarse foliage of extraordinary year-round quality. It is the most ornamental upright plum yew to my eye. Some of the most handsome plants I have seen are a group of seedlings at the Arnold Arboretum (Boston, Massachusetts). Korean plum yew makes an exceptional hedge or mass with the unique ability to thrive in diverse soils and to perform well in both shade or sun—with full shade resulting in, a more open habit. Growth rate is slow, which can be a positive marketing niche for landscapers dealing with urban and suburban clients on small properties who don't want to have to shear or prune. Plants can reach 5 to 10 ft with a spread of 3 to 6 ft after 5 to 10 years, depending on the region they're grown in. In the southeast, with high light year-round, and high night temperatures during the growing season, plants can reach 6 ft in as many years, but in the northeast, growth is considerably slower with plants taking as long as 10 years to reach 6 ft. Korean plum yew currently found in the U.S. is hardy to at least USDA Zone 6, and possibly colder (it needs trial in colder areas), but we haven't collected seed (and grown plants) of this species from the full extent of its natural range. *Cephalotaxus koreana* is easy, but slow, to root almost any time of the year from stem cuttings under mist—avoid the spring flush and heavily flowering branches if possible. Standard conifer rooting techniques apply: bottom heat, treatment with moderate concentrations of KIBA (avoid alcohol-based solutions), cool air temperatures, and good light will generally increase rate of root development on cuttings. Large cuttings seem to root as well as small ones under mist and use of larger cuttings can speed time to a salable plant. Make sure to use terminal cuttings to insure upright growth of plants after rooting. Seed requires stratification (can be sown outdoors as well) and can be very slow to germinate. Be careful when harvesting seed to note if you are potentially collecting hybrid seed—species of *Cephalotaxus* appear to hybridize successfully. Therefore seed from locations with multiple species are likely hybrid (which is not to say that such hybrid seedlings might not be of horticultural interest, just that they may not be of single species parentage).

***Cornus florida* 'Spring Grove' Plant Patent #8500**

This selection of *Cornus florida*, located in Spring Grove Cemetery and Arboretum in Cincinnati, Ohio, has been under observation for the past two decades. The prolific flowering nature of this plant was recognized in the mid 1970s but it wasn't until the horrendous winters of 1976 and 1977 that we realized one of the hidden merits of this dogwood.

Cornus florida 'Spring Grove' withstood consecutive days of temperatures in the range of -25F. and sustained no freeze-related damage. This is true of floral buds and stem tissue. Most other selections or seedlings of this species received minor or serious damage after those two winters.

The flowering characteristic of this selection is probably the most notable feature. Where most dogwoods of this species bear one terminal floral bud 'Spring Grove' will frequently exhibit two or three floral buds per terminal. This habit is not uncommon to *C. florida*, but coupled with hardiness and vigor of 'Spring Groves' these assets combine to form an outstanding landscape specimen.

The bracts measure, on average, a full 5 inches from tip to tip, very similar in size to those of the 'Cherokee Princess' selection.

The parent plant is currently 23 ft tall with an average drip line width of 33 ft. It is located in the understory of a large specimen of *Quercus rubra*.

The fall color is typically a reddish-purple somewhat consistent with most common dogwood.

To date we have not observed any signs of *Anthracnose* where this plant is concerned. However, this is not to imply an inherent resistance to the disease.

Overall, *C. florida* 'Spring Grove' forms a beautiful landscape specimen. The flowering and fruiting displays, along with excellent cold tolerance, combine to produce a superior selection of this species.

***Cornus mas* 'Spring Sun'**

This selection of *Cornus mas* has several outstanding features when compared to several dozen other *C. mas* plants located in Spring Grove Cemetery and Arboretum.

Probably the first and most notable feature is this plant's tendency to be non-suckering. In the six years that I have worked for Spring Grove I have only pruned two suckers from the base of this selection. In June of 1993 a large ash tree fell and crushed the back half of this plant. Even after sustaining heavy damage from that incident the plant still showed no signs of suckering in the latter half of 1993 or throughout the summer of 1994. This non-suckering habit makes this vigorous selection easy to grow in a small tree form. The growth habit to date is a broader than tall form. Currently the dimensions of this tree are as follows:

Height - 16 ft

Width - 23 ft

Diameter 12 inches from base - 8 1/2 inches.

The truly exciting feature of this selection is not recognized until flowering commences in March of each year. The flower buds are generally about 30% to 50% larger than many of plants of this species in our collection. As the buds open the flowers are proportionate in size to the bud. The overall effect is a dazzling display when few other plants are in bloom. Flower color is a bright golden-yellow and is a slightly deeper hue of gold than other *C. mas* plants at Spring Grove.

The leaves are slightly larger and a deeper green than other plants of the species. The foliage appears very "clean" as the leaves are much more glossy than any other *C. mas* that I have observed. The leaves then consistently turn a deep burgundy late in the Fall of each year.

I feel that *C. mas* 'Spring Sun' is a superior selection of this species and could fill several niches within the horticultural industry. The inherent hardiness of this

species coupled with this selection's habit of being a tree form will result in great popularity and functionality within our industry.

***Fraxinus pennsylvanica* 'Johnson', Leprechaun™ green ash. PPAF**

Leprechaun™ green ash is a dwarf cultivar selected by Michael Yanny of Johnson's Nursery, Inc., Menomonee Falls, Wisconsin. It was found when it was a 3-year-old seedling growing in a row of budding understock. The original tree, now 11 years old, stands 7 ft tall by 7 ft wide and has a trunk diameter of 4 inches at 6 inches above the ground. A species green ash would typically have dimensions two to three times larger at 11 years old. The twigs on Leprechaun™ green ash have internodes about one-third as long as those on the species. The leaves and leaflets are dwarf as well, being about one-half normal size. This gives the tree a finer textured appearance.

Like the species, it is a tough, durable tree. It should prove most useful in restricted urban settings where conditions are harsh.

Topworking onto standard green ash in the spring has been the most satisfactory method of propagation.

The tree is being patented and the name trademarked. Leprechaun™ green ash is being introduced by Johnson's Nursery, Inc. and J. Frank Schmidt & Sons Co., of Boring Oregon. Contact Schmidt for licensing.

***Iris sibirica* 'Red Royale'**

This iris was hybridized by Hugh Pearson for the 50th anniversary at the Royal Botanical Gardens, Hamilton in 1991. The height is 18 inches (approx. 45 cm). Flower colour is dark red purple (RHS 71A) with bluish blaze on falls with red purple (72A) style arms and a slight fragrance. Parents are 72-P-3 × 'Royal Ensign'. Besides the superior leaf which lasts well into the fall, colour this iris displays good upright leaves which tolerate strong winds. The rhizomes bulk up quickly (5 rhizomes will produce 25 to 30 more in two growing seasons. This cultivar is registered with the American Iris Society.

***Iris sibirica* 'Sapphire Royale'**

This iris was hybridized by Hugh Pearson for the 50th anniversary at the Royal Botanical Gardens, Hamilton in 1991. The height is 17½ inches (approx. 45 cm). Flower colour is: styles dark violet blue (RHS 94A); style arms light purple (76B); falls darker violet blue (93A). Besides the superior leaf colour which lasts well into the fall, this iris displays good upright leaves which tolerate strong winds. The rhizomes bulk up quickly (5 rhizomes will produce 25 to 30 more in two growing seasons. This cultivar is registered with the American Iris Society.

***Picea abies* 'Perry's Gold'**

'Perry's Gold' was found in a planting along the road in East Orange, Vermont by Arthur Perry. Growth rate is slower than normal and the plant's most important feature is its bright gold to almost white new growth, giving the appearance of a plant in bloom and drawing much comment in the garden. The color fades to gold-green as the growth hardens off.

Propagation is by grafting and plants propagated from lateral shoots have

remained prostrate for over 15 years without showing signs of developing a leader. 'Perry's Gold' is available in a number of commercial nurseries in the United States.

***Pieris japonica* 'Sweetwater'®**

'Sweetwater' is a plant for all seasons. It is hardy, will grow in Zones 5 to 7, and with no disease or insect problems. It survived the winter of 1993-94 and the original parent plant is 35 years old.

Flowering starts in late March to early April (Long Island, New York) when the buds open to reveal white, bell-shaped flowers that have a sweet fragrance. Flowering period lasts 7½ to 8½ weeks. In open shade the flowers last longer. The long flowering period results because the flowers are sterile and therefore no seed capsules are produced. Therefore all the plants energy goes into the production of flowers for next year and foliage. The leaves are carried for four seasons and result in a dense habit.

In late summer the stems that hold the flower buds begin to turn a light red color, the color deepens to a bright wine red by late fall—this gives the plant a nice fall and winter appearance.

Propagation is possible from dormant cuttings, summer cuttings under mist and tissue culture.

***Pinus strobus* 'Louie'**

This plant originated in a swamp near a Christmas tree plantation in northern Vermont. The plant was named after the property owner.

The parent plant is 7 ft high by 4 ft wide with a slower than normal annual growth rate of 6 to 10 inches. The outstanding feature of this pine is its bright golden color, which it retains throughout the year, making it a focal point in the landscape. So far, it has not burned in the harsh Zone 3 winters of northern Vermont.

'Louie' grafts easily and has been distributed to a number of commercial nurseries.

***Pseudolarix amabilis*, golden larch**

This deciduous conifer is native to the coastal mountains of China. It was discovered by the British plant explorer Robert Fortune and introduced into European cultivation in 1852.

The golden larch is broadly pyramidal with whorls of branches whose tips have a weeping habit. It is slow growing and often will seem as wide as high, a 45 ft tree may be 40 ft across. For this reason it is often planted in larger spaces thus giving it the opportunity to stretch its branches unencumbered.

Beautifully graceful in all seasons, spring and fall are foliage high points. Spring commences with new growth a light yellow-green turning a green-blue at maturity. The fall is a time of stunning contrast with the foliage turning a strong clear golden yellow. It is no wonder this plant is considered one of the finest exotics in America.

Culturally no special care is needed. It does well in easily draining moist, fertile soils that are acid to neutral in nature. It transplants well balled and burlapped,

preferring full sun to partial shade.

The best method of propagation is by seed. The difficulty is the availability of viable material. The Arnold Arboretum is fortunate in having trees that produce viable seed every 3 to 4 years. Some seed will germinate on its own, however, we have found that 60 days at 40F will result in more uniform germination.

***Rhododendron* 'P.M.A. Tigerstedt'**

This plant grows to 6 3/4 ft and has an upright growth habit. Foliage is dark green and non-pubescent. Flowers are white with strong violet flecks in the upper part of the corolla. Selected from progeny of (*R. brachycarpum* ssp. *tigerstedtii* × *R. catawbiense* 'Album Glass'). This rhododendron has a hardiness of H1 (-35F).

***Rhododendron* 'Consolini's Windmill'**

Among the most brilliant of all red and white bicolors (see photo in the winter 1993 issue of the ARS Journal, p. 3), this plant was the work of many hands. Hybridized by Tony Consolini, Charles Dexter's head gardener, it was recognized, bud-grafted, and saved by Jack Cowles; it grew for many years near a windmill at Heritage Plantation and was introduced through our nursery in 1989. While the grafted plant at Heritage appears reasonably hardy, dense, and attractive, these qualities are still under evaluation in smaller specimens.

Finding such an extraordinary flower in Dexter territory seems reasonable, because Charles Dexter created many of the world's finest pink bicolors—including 'Sandwich', 'Appleblossom', 'Todmorden', and many others—and Tony Consolini was especially noted as a breeder of fine reds.

***Rosa* 'Winnipeg Parks'**

'Winnipeg Parks' is a hardy, recurrent-blooming shrub suitable for use as a bedding landscape rose or specimen plant. It was introduced in 1990 and named for the City of Winnipeg Parks and Recreation Department Centennial in 1993.

Plants are dense bushes, which average 0.4 to 0.7 m in height and 0.3 to 0.7 m in width. The flowers are slightly fragrant and are medium red in color. They average 8 cm across, have 22 petals, and are produced in clusters of 1 to 4. Plants have moderate to good field resistance to powdery mildew and blackspot. 'Winnipeg Parks' has the most attractive foliage of the Parkland roses to date as well as interesting red-tinged leaves in the fall. This cultivar has survived winters in hardiness Zone 2b. It propagates very easily from softwood stem cuttings. 'Winnipeg Parks' is a complex hybrid that incorporates the cultivars Assiniboine, Adelaide Hoodless, Cuthbert Grant, Morden Cardinette, and Prairie Princess.

We have exclusive rights in the United States and will sub-license others. Royalty is \$0.40.

***Thuja* 'Giganteoides' (syn. *T. occidentalis* 'Gigantea', 'Giganteum', 'Giganticum')**

Thuja occidentalis (eastern arborvitae) is an industry foundation. *Thuja plicata*, western red cedar, has been important in forestry and recently has been receiving increased attention as a landscape plant with great commercial potential because

of its relatively fast growth rate, disease and pest resistance (including deer resistance), and good winter color. A superior *Thuja* selection, *Thuja* 'Giganteoides', is a putative hybrid of *T. occidentalis* and *T. plicata* which was found in a block of seedlings in Denmark about 1935. 'Giganteoides' is a tightly pyramidal evergreen conifer with the habit of *T. plicata* and with foliage intermediate in character between *T. occidentalis* and *T. plicata* but retaining the slightly pendulous quality of the sprays of *T. plicata*. It will ultimately reach the stature of *T. plicata* at upwards of 60 ft. 'Giganteoides' combines the excellent foliage quality and tight habit of the best *T. plicata* cultivars (e.g. 'Atrovirens', 'Hogan') with exceptional, apparently hybrid, vigor. This combination translates to an unusually rapid growth rate, generally giving 3 ft a year for the first 5 to 8 years of growth, even in stressful landscapes and clay soils. Foliage remains an attractive green throughout the winter. 'Giganteoides' is a superior alternative to Leyland cypress (\times *Cupressocyparis leylandii*), and is an excellent evergreen for screening or specimen use. It is reported to be hardy in parts of USDA Zone 5. 'Giganteoides' roots very readily under mist most anytime of year, appears indifferent to how or when it is containerized, and grows on rapidly thereafter. It is handsome even as a young plant in containers. *Thuja* 'Giganteoides' is an exceptional screening conifer that is simple to propagate and grow in diverse production and landscape environments.

***Tsuga canadensis* 'Vermeulen's Wintergold'**

We have been watching this hemlock turn gold in the fall for 8 years now and it has not failed us. By November there is a new glow within the houses where they are contained, bright enough to turn your head on the chance you have forgotten them while they were in their summer green.

We cannot tell you the mature height. It was discovered by our former manager Ron Byleckie in a seedling batch in 1986. However, the growth is extremely vigorous (we've seen 18 inches in a year) and the habit is pyramidal. The intensity of the color varies with the pH of the soil.

'Wintergold' has been tested in Ravenna, Ohio and Wilkes Barre, Pennsylvania. Each location reports consistency in the seasonal color change.

Ulmus species (elms) are tough trees—adaptable to the rigors of the modern urban landscape, such as soil compaction and air pollution, while also valued for their beauty. Several elm selections with superior resistance to Dutch elm disease and/or elm leaf beetle have resulted from research efforts to identify and utilize pest and disease resistant species by A.M. Townsend at the U.S. National Arboretum, Washington, DC, and Delaware, Ohio sites. The following selections were evaluated in field inoculation and laboratory tests for Dutch elm disease resistance and response to elm leaf beetle. All can be propagated easily by softwood cuttings in late spring using 0.4% to 0.8% IBA in a powdered or liquid formulation.

***Ulmus* 'Frontier'**

Ulmus 'Frontier' (*U. carpinifolia* \times *U. parvifolia*) (USDA Agricultural Research Service/National Arboretum, 1992; Townsend et al., 1991a) is the first released cross of a spring-flowering by fall-flowering elm. Its small leaves emerge red, turn green and display a red-purple fall color unusual in elms. 'Frontier' grows more

rapidly than *U. parvifolia*, and matures to an intermediate size-26.5 ft high × 16 ft wide in 19 years. It is hardy to Zone 5. 'Frontier' has shown high levels of resistance to Dutch elm disease (DED) and moderate resistance to elm leaf beetle (ELB). In areas with high elm leaf beetle populations, 'Frontier' will show less elm leaf beetle damage if planting close to buildings is avoided.

***Ulmus parvifolia* 'Pathfinder'**

Ulmus parvifolia 'Pathfinder' (USDA Agricultural Research Service/National Arboretum, 1992) is a selection of the lacebark or Chinese elm. The bark of 'Pathfinder' displays the distinctive lacebark quality of the species and exfoliates to reveal a grey orange inner bark. It has a moderately vase-shaped crown that becomes pendulous at a much lower height than American elm, reaching 37 ft × 22 ft at 27 years. Glossy yellow-green leaves turn a pleasing grayed red in fall and red-purple fruit ripens in October. 'Pathfinder' possesses high levels of resistance to DED and ELB. It has been successfully grown from Washington, DC to Ohio. Propagation success was improved by utilizing a fine-textured medium.

***Ulmus wilsoniana* 'Prospector'**

Ulmus wilsoniana 'Prospector', selected by A.M. Townsend and L.R. Schreiber (USDA Agricultural Research Service/National Arboretum, 1992; Townsend et al., 1991b), is a selection of a relatively new species to the nursery trade. 'Prospector' is a single-trunked, vase-shaped, deciduous tree growing to 23 ft × 20 ft at 11 years (estimated 50 ft × 25 ft when mature). It produces a dense canopy of large leaves similar to American elm. New leaves emerge orange-red, mature to green, and turn yellow in autumn. It is highly resistant to DED and ELB. Hardy to Zone 5 (4?). 'Prospector' deserves a good look as a relatively pest-free lawn or street tree.

LITERATURE CITED

- USDA Agricultural Research Service/National Arboretum.** 1992. What's New in '92. 'Frontier'. 'Prospector'. 'Pathfinder'. *American Nurseryman* 175(4):42.
- Townsend, A.M., L.R. Schreiber, W.O. Masters, and S.E. Bentz.** 1991a. 'Frontier' Elm. *HortScience* 26(1):80-81.
- Townsend, A.M., L.R. Schreiber, W.O. Masters, and S.E. Bentz.** 1991b. 'Prospector' Elm. *HortScience* 26(1):81-82.

The Thursday morning session was moderated by Dan Studebaker.