

JC Raulston Arboretum

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Contents Page

- [Notes From The Arboretum](#)
- [Rootstocks for Ornamentals Production and Use in the Southeastern United States](#)
- [An Updated Checklist of Existing *Cercis Taxa*](#)
- [Trumpetvines \(*Campsis*\) for Landscape Use](#)
- [Plants Distributed to Nurserymen - 1992 NCAN Summer Short Course](#)
- [Book News](#)
- [New Plants Received In The NCSU Arboretum \(now the JC Raulston Arboretum\) - January to December 1992](#)

Notes from the Arboretum

Recently the Board of Advisors for The NCSU Arboretum (now the JC Raulston Arboretum) met for their annual retreat day to reflect and work on issues of importance for future development and improvement of this program/facility. During the course of the day's work - a workshop exercise was conducted in which participants were divided into three teams and asked to make a listing of the various things that The NCSU Arboretum (now the JC Raulston Arboretum) does "uniquely well" in comparison to other arboreta and public gardens. One of the group's listings (not mine of course) was that our newsletters have the best selection of excuses on why the newsletter is so late - so good in fact, that many subscribers comment that they find that the most interesting part! Sigh!

Well - here we are once again trying to explain (to myself, as well as to readers) just why we could possibly be so late?

If nothing else, there is a fascination of the American psyche with records of all types - so perhaps I can justify it with saying we were stretching for a new world record in the longest time between newsletters. Celebrate the achievement!

Careful readers who have received our recent book compilation of past newsletters, *Chronicles of The NCSU Arboretum* (now the JC Raulston Arboretum), have remarked that having a detailed index to find assorted information in the hundreds of pages of text has been the favored and most useful part of this book - and they were quite surprised to find that we had even indexed all the past excuses to make this favored reading material readily available!

Anyhow - how can two years go by so quickly? In the blur of our office and work these days it somehow seems amazingly easy. It's not that we haven't been writing - and in fact part of the delay on this task has possibly (I'll use anything I can grab here!) been due to the effort to clear up long-standing backlogged needs of writing elsewhere. In this time we've completed and published the *Chronicles* (thank you, thank you, thank you Kim), the *Guide to Propagation of Trees and Shrubs in The NCSU Arboretum* (now the JC Raulston Arboretum), and a nearly completed book on trees and shrubs of the arboretum (for Timber Press) - as well as trying to get our arboretum plant records more in order. Thanks to major effort by Val Tyson and Tom Bumgarner (and many others) in support - I've been working on eliminating unknown identity plants from the grounds (visitors are astonished at the amount of chainsawing and plant removal these days) and nursery (our members giveaway day will probably never have such abundance again), and working on the computer records. We've made huge and exciting progress (thank all of you who are facilitating these housecleaning and organizational activities).

We do keep working with real plants and have much to share with our members who support our program in such vital ways. Thank you for your patience. An assortment of news, personal reflections, and plant stuff follows. Enjoy.

ROOTSTOCKS FOR ORNAMENTALS PRODUCTION AND USE IN THE SOUTHEASTERN UNITED STATES

J. C. Raulston and Kim E. Tripp (original version in: Proc. SNA Res. Conf. 37:326-329)

Fifteen years of ornamental plant adaptability trials at The NCSU Arboretum (now the JC Raulston Arboretum) with widely diverse species from around the world has shown the single most important environmental/climatic limitation to be root survival under wet, hot summer conditions. As temperatures rise, respiration rates increase which create a requirement for more oxygen to permit root survival. Sudden flooding of poorly drained soils during maximum temperature periods can create temporary, but quickly fatal, anaerobic conditions for roots at the time of peak oxygen demand. This situation is unique to the southeastern U. S. as soils in southwest and western states are dry (and well aerated) at periods of high temperatures, and central and northeast areas are cooler when rains occur. In addition, modern container production with carefully formulated media of coarse texture and rapid drainage allows simple, successful production of plants with fragile root systems which often cannot be subsequently grown easily in landscape soils of the production region. Prominent examples include many Ericaceous plants and such native and exotic taxa as *Franklinia alatamaha*, *Gordonia lasianthus*, *Ilex X meserve* ("Blue Hollies"), and *Taxus X intermedia*.

Grafting is used to produce plants which combine aerial portions of superior ornamental or productive capacity with adapted and tolerant root systems suitable for the area of production. The majority of such grafting is used in fruit crop production where an economic product permits the extra costs of such speciality propagation. Very little research has been conducted on potential rootstocks specifically for ornamental plants in the southeastern U. S. due to the lack of commercial grafting operations in the region, the lack of such specific skills among most academic researchers, and the time and expense to conduct such long-term trials on "minor" crops.

Commercial grafting firms in the Pacific northwest and the northeast are not aware of the potential problem and often use rootstocks which work well in those areas, but are failures when planted in the southeastern U. S. A prime example is the use of *Abies balsamea* or *fraseri* seedlings for all fir grafting (due to low cost and ready availability as major Christmas tree species). These are the two weakest root system firs in existence and such grafted plants never survive the first month of wet summer conditions here. In early years after its introduction, *Cornus X 'Eddie's White Wonder'* was grafted in the Pacific northwest on *C. nuttallii* which cannot be grown in the southeast, leading early researchers to believe the scion cultivar could not be grown in the east. Many other such examples exist.

The following listing contains theoretical proposed graft rootstock:scion combinations for research and production trials. The listing has been formulated from observation of plant behavior at The NCSU Arboretum (now the JC Raulston Arboretum), in other gardens around the world, and native habitats of many of the species. The plant(s) listed first (before the hyphen) are taxa which have been observed to have more tolerance to hot, wet southeastern U. S. soils than average species of the genera and therefore have potential for understock use. The plant(s) listed following the hyphen are those which have ornamental value, but have been observed to have survival problems in poorly drained soils and therefore would be the scion stock.

In a few cases bigeneric combinations have been proposed where tolerant species do not exist within the problem genera. Bigeneric grafts are generally less successful than interspecific grafts, but enough successful combinations have been achieved in the past to warrant trial. An asterisk (*) is used after the proposed combination where promising trial grafting work has been conducted at NCSU or observed elsewhere.

- *Abies firma* - for other *Abies* taxa*.
- *Acer japonicum* or *palmatum* - for *Acer circinatum* and *A. macrophyllum*.
- *Acer rubrum* - for *Acer pentaphyllum**.
- *Acer saccharum* - for *Acer griseum**.
- *Arbutus unedo* - for *Arbutus arizonica*, *menziesii*, and *texana*.
- *Baccharis halimifolia* - for *Baccharis pilularis*.
- *Betula nigra* - for other *Betula* taxa*.
- *Calycanthus floridus* - for *Calycanthus occidentalis*.
- *Ceanothus X pallidus* or *americanus* - for west coast *Ceanothus* taxa.
- *Cercis canadensis* or *chinensis* - for *Cercis griffithii*, *occidentalis*.
- *Chamaecyparis pisifera* or *thyoides* - for *Chamaecyparis lawsoniana* and *nootkatensis* cultivars.
- "*Chitalpa* " (*Catalpa X Chilopsis* hybrid) - for *Chilopsis linearis*.
- *Cornus florida* - for *Cornus nuttallii* and *C. X 'Eddie's White Wonder'**.
- *Crataegus aestivalis* - for other *Crataegus* taxa.
- *Cupressus bakeri* or *glabra* - for *Cupressus sempervirens* 'Swane's Golden'.
- *Eleagnus X ebbingii* or *pungens* - for *Eleagnus angustifolia*.
- *Fagus grandifolia* - for *Fagus sylvatica* cultivars; trial on *Nothofagus* sp. ??
- *Garrya ovata* var. *lindheimeri* - for *Garrya elliptica* 'James Roof'.
- *Photinia X fraseri* - for *Heteromeles arbutifolia* .
- *Ilex X 'Nellie Stevens'* - for *Ilex aquifolium* and *I. X meserveae* ("Blue Hollies")*.
- *Itea chinensis* - for *Itea ilicifolia*.
- *Kalmia latifolia* - for *Kalmia cuneata* and *microphylla*.
- *Magnolia virginiana* - for *Magnolia sieboldii* and *wilsonii*.
- *Myrica cerifera* - for *Myrica californica*.
- *Picea abies*, *omorika*, or *orientalis* - for *Picea brewerana*.
- *Pieris japonica* - for *Pieris floribunda*.

- *Pinus glabra*, *pinia*, *sylvestris*, or *virginiana* - for *Pinus edulis*, *muricata*. (2-needle pines).
- *Pinus palustris*, *serotina*, *rigida*, or *taeda* - for *Pinus coulteri*, *jeffreyi*, *ponderosa*, *sagbiniana*. (3-needle pines).
- *Pinus cembra*, *parviflora*, or *strobus* - for *Pinus albicaulis*, *aristata*, *flexilis*, *torreyana*. (5-needle pines).
- *Platycladus orientalis* - for *Microbiota decussata* (Unlikely bigeneric graft - but the only possibility for south).
- *Pseudolarix amabilis* - for *Larix* taxa. (Unlikely bigeneric graft - but the only possibility for *Larix* in south).
- *Quercus virginiana* - for the numerous west coast and Mediterranean evergreen *Quercus* species.
- *Raphiolepis umbellata* - for *Raphiolepis indica* taxa.
- *Rhododendron chapmani* - for small-leaved evergreen *Rhododendron* taxa; trial for *Kalmiopsis leachiana*??
- *Rhododendron atlanticum* - for deciduous *Rhododendron* taxa; specifically *R. occidentale*.
- *Sorbus alnifolia* - for other *Sorbus* taxa.
- *Spirea* sp. - for *Holodiscus discolor*. (Unlikely bigeneric graft, understock suckering impractical also).
- *Stewartia monadelpa*, *koreana*, or *pseudocamellia* - for *Stewartia malacodendron* and *ovata*.
- *Styrax americanus* or *japonicus* - for *Styrax hemsleyana*, *obassia*, *officinalis*, *officinalis californicus*, *platanifolia*, *texana*, and *youngae*.
- *Syringa oblata* var. *dilatata* - for *Syringa vulgaris* cultivars.
- *Taxus chinensis* - for *Taxus X intermedia* cultivars.
- *Tsuga canadensis* or *sieboldii* - for *Tsuga caroliniana*, *heterophylla* and *mertensiana*.

Successful combinations from the above potential grafting/rootstock trials would make possible the successful landscape cultivation of new ornamental plants currently impractical or impossible to grow in the southeastern U. S. There is an industry conception that grafted plants are a commodity of the past with increasingly unavailable skills needed and greater costs than for cutting production of clonal taxa. This statement is generically true for mass market crops, but for a number of plants grafting may be the only feasibility for successful use of the taxa in the region. Knowledge of graft combination feasibilities would create opportunities for development of regional speciality propagation nurseries to fill the potential consumer market for such connoisseur plants.

Related Literature:

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AN UPDATED CHECKLIST OF EXISTING *CERCIS* TAXA

Stephen Burns and J. C. Raulston (original version in Proc. SNA Res. Conf. 38:342-345).

"Redbuds" (*Cercis* taxa) are excellent shrubs to small trees with spectacular spring flowers commonly grown in nursery production across the US (2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 15). *Cercis* evaluation has been a focused program at The NCSU Arboretum (now the JC Raulston Arboretum) and with the invaluable propagation assistance of Vine & Branch Nursery, Chapel Hill, NC, (now closed) the living collections today contain the largest number of taxa in any location in the world. Previous papers (9, 10, 11) have variously summarized the contents of the collection and their characteristics. Since these papers were published, further evaluation information has accumulated, new cultivar taxa have been developed and added to the collection, and taxonomic research has resulted in new name changes for botanical species (1). This paper briefly summarizes the currently existing taxa of *Cercis*.

The following checklist summarizes the current taxonomy and existing cultivars of redbuds with brief notes on new taxonomy or plant characteristics of the known 56 taxa. Those currently in The NCSU Arboretum (now the JC Raulston Arboretum) collection are indicated by astericks (*) following the name.

- *Cercis californica* Torr. ex Benth subsp. *californica** - "California Redbud" native to north-central California.
- *Cercis californica* subsp. *californica* 'Alba'* - White-flowered selection of the California Redbud introduced by Rancho Santa Anna Botanic Garden, Claremont, CA.
- *Cercis californica* subsp. *californica* 'Claremont' - Deep magenta-flowered selection of the California Redbud introduced by Rancho Santa Anna Botanic Garden, Claremont, CA.
- *Cercis californica* subsp. *nephrophylla* (Greene) Ballenger ined. - "Southern California Redbud" native to mountains east of San Diego, CA. A new taxonomic designation from Ballenger (1).
- *Cercis canadensis* L.* - "Eastern Redbud" native from Florida to Michigan to Mexico. Most commonly grown commercial nursery species in the eastern US.

- *Cercis canadensis* 'Alba'* - White-flowered selection(s) of the Eastern Redbud; multiple clones exist.
- *Cercis canadensis* 'Appalachia'* - Striking "closest-to-red" flower color of any redbud. Much commercial interest at present with various growers beginning buildup - probably to market in '96..
- *Cercis canadensis* 'Dwarf White'* - White flowered cultivar with compact growth; selected in Illinois.
- *Cercis canadensis* 'Flame'* - Double-flowered cultivar found in Illinois in 1905 and introduced by Louis Geraldi Nursery, O'Fallon, IL; extremely fast growth; fewer seed pods.
- *Cercis canadensis* 'Forest Pansy'* - Purple-foliaged cultivar with typical flowers; originated at Forest Nursery, McMinnville, TN in 1947; purple color fades with high summer heat.
- *Cercis canadensis* 'Pinkbud' - Pink-flowered selection found in Kansas City, MO.
- *Cercis canadensis* 'Plena' - Semi-double flowered selection originating before 1894.
- *Cercis canadensis* 'Pubescens' - Leaves downy on underside.
- *Cercis canadensis* 'Rosea' - Unknown Hortus Third listing which may no longer exist; rose-colored flowers.
- *Cercis canadensis* 'Royal White' ('Royal')* - White-flowered selection by Dr. J. C. McDaniel, Univ. of Il.; introduced by Louis Geraldi Nursery, O'Fallon, IL.
- *Cercis canadensis* 'Rubeye Atkinson'* - Pink-flowered selection.
- *Cercis canadensis* 'Silver Cloud'* - Silver-white variegated foliage and magenta flowers; introduced by Yew-Dell Nursery, Crestwood, KY in 1964.
- *Cercis canadensis* 'Wither's Pink Charm' ('Pink Charm')* - Pink-flowered selection found by D. D. Withers in Virginia around 1930.
- *Cercis canadensis* (Unnamed pendulous seedling) - a strongly weeping variant found in New York now in evaluation for production; will likely be patented and introduced in near future.
- *Cercis canadensis* (Unnamed variegated seedlings) - several seedlings have been selected by various growers and are under evaluation for introduction.
- *Cercis canadensis* subsp. *mexicana* (Rose) Murray* - The "Mexican Redbud" with smaller, glossy foliage with undulate margins. The taxonomy has long been in debate with multiple names in use. It is now formally designated as listed here by the most recent definitive taxonomic study (1).
- *Cercis canadensis* subsp. *texensis* (Wats.) Murray*- The "Texas Redbud" with thick glossy foliage. The taxonomy has long been in debate with multiple names in use (*C. reniformis* most common). It is now formally designated as listed here by the most recent definitive taxonomic study (1).
- *Cercis canadensis* subsp. *texensis* 'Oklahoma'* - The deepest magenta-purple flowers of any redbud with superb leathery, glossy foliage; a selection of the Texas Redbud found in Arbuckle Mountains of Oklahoma in 1964 and introduced by Warren & Son Nursery, Oklahoma City, OK.
- *Cercis canadensis* subsp. *texensis* 'Texas White'* - White-flowered selection of the Texas Redbud with superb leathery, glossy foliage; originated at Germany Nursery, Fort Worth, TX in the late 1960's.
- *Cercis canadensis* subsp. *texensis* 'Traveler' - a beautiful strongly weeping variant found in Texas by Dan Hosage of San Marcos; recently patented and now in buildup stages of production for introduction in the near future. Will be best grown as a high graft standard to display the weeping habit.
- *Cercis canadensis* subsp. *texensis* (Unnamed variegated seedling) - White-variegated foliage seedling found in Texas; under evaluation but appears it may be too chimeral and unstable to name and introduce.
- *Cercis chinensis* Bunge* - "Chinese Redbud"; second most common species in production; more shrubby.
- *Cercis chinensis* 'Alba'* - White-flowered selection of Chinese Redbud.
- *Cercis chinensis* 'Arborea' - Listed in Hortus Third with no information and does not seem to now exist in cultivation.
- *Cercis chinensis* 'Avondale'* - Profuse flower-bud set completely hiding the branches when in flower; a form of Chinese Redbud selected in Avondale, New Zealand and introduced by Duncan & Davies Nursery in New Zealand.
- *Cercis chinensis* 'Nana'* - Compact form of Chinese Redbud growing to 3-4'.
- *Cercis chingii* Chun* - Chinese species of extremely fast growth; earliest flowering of all species.
- *Cercis chingii* 'Gong Fen' - Chinese selection of unknown characteristics.
- *Cercis chingii* (Unnamed white-flowered seedling) - Discovered in seedling lot at U. S. National Arboretum; under observation for possible introduction - more recently decided it is likely *C. chinensis*..
- *Cercis chuniana* Metc. - Chinese species; the last *Cercis* species to be in cultivation with seed arrival from China in 1993 and first plants germinating in spring 1994.
- *Cercis gigantea* Cheng.* - "Giant Redbud"; Chinese species with large foliage and vigorous growth.
- *Cercis glabra* Pampanini* - Chinese species very similiar to *C. chinensis*.
- *Cercis griffithii* Boiss* - "Afghanistan Redbud" native to Middle East; similar to *C. siliquastrum*; rare in cultivation.
- *Cercis orbiculata* Greene - "Intermountain Redbud" native to Nevada, Utah and Arizona; very similar to the California Redbud.
- *Cercis racemosa* Oliver* - "Chain-flowered Redbud" native to China; the only redbud producing flowers in chains 3-5" in length; paler flower color than most redbuds; recently distributed by U. S. National Arboretum.
- *Cercis siliquastrum* L.* - "Mediterranean Redbud" native to southern Europe from Israel to Spain; the most commonly grown species in Europe with several listed cultivars which may or may not still exist in cultivation.
- *Cercis siliquastrum* var. *siliquastrum* * - found in Royal Botanical Garden, Madrid, Spain - not known how it differs from straight species.
- *Cercis siliquastrum* 'Alba' ('Albida')* - White-flowered selection of Mediterranean Redbud; produced and sold in Europe.

- *Cercis siliquastrum* 'Bodnant'* - Deep purple-flowered selection of Mediterranean Redbud from Bodnant Gardens, Wales; in England commercial production.
- *Cercis siliquastrum* 'Carnea' - Pink-flowered selection of Mediterranean Redbud; may not still exist in cultivation.
- *Cercis siliquastrum* 'Flora-Plena' - Double-flowered selection of Mediterranean Redbud; may not still exist in cultivation.
- *Cercis siliquastrum* 'Fructu-Rubra' - Red-fruited selection of Mediterranean Redbud; may not still exist in cultivation.
- *Cercis siliquastrum* 'Penduliflora' - Selection of Mediterranean Redbud with long pedicels and drooping flowers; may not still exist in cultivation.
- *Cercis siliquastrum* 'Rubra' - Deep-colored selection of Mediterranean Redbud at Wisley Gardens, England.
- *Cercis siliquastrum* 'Sinensis' - More vigorous selection of Mediterranean Redbud; may not still exist in cultivation.
- *Cercis siliquastrum* 'Sterilis' - Sterile selection of Mediterranean Redbud which does not fruit; may not still exist in cultivation.
- *Cercis siliquastrum* 'Variegata' - Variegated foliage selection of Mediterranean Redbud; may not still exist in cultivation.
- *Cercis yunnanensis** - Chinese species very similar to *C. chinensis*.
- *Cercis yunnanensis* 'Celestial Plum' - heavy flowering with deep purple flowers; introduced by The NCSU Arboretum (now the JC Raulston Arboretum) in summer 1994 from softwood cuttings.

This checklist provides growers and gardeners with information about the range of *Cercis* taxa which exist for selection of types for potential future nursery production as well as which taxa are available for sharing of scion wood upon request from The NCSU Arboretum (now the JC Raulston Arboretum). Current correct taxonomic designations presented here can be used by nurserymen to produce catalogs and pricelists with accurate names. The most significant naming change for plants currently in production in the southeastern US is for the Texas Redbuds, 'Oklahoma', 'Texas White', and 'Traveler' - which should now be listed as cultivars of *Cercis canadensis* subsp. *texensis*.

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TRUMPETVINES (*CAMPSIS*) FOR LANDSCAPE USE

J. C. Raulston and Greg Grant (Lone Star Nursery, Texas)

(original version in press: Proc. SNA Res. Conf. 39)

Vines have traditionally been a difficult and awkward group of plants for the nursery production and retailing market to handle with often rampant growth and resulting control and confinement issues to master. A perception exists also in the landscape and public mind that all vines are uncontrollably aggressive and must be used with great restraint or in areas where high pruning maintenance can be provided. However a wide range of vines exist with evergreen (8) and deciduous types which encompass diverse ornamental characteristics, seasons of interest and growth rates (4). In recent years, southeast nurseries have found a ready market for good vines well grown as trellised container plants, and the rapid growth of most makes this marketing highly profitable when sales are good (3,7).

In 1985 The NCSU Arboretum (now the JC Raulston Arboretum) collected plants in Korea as a part of an expedition in cooperation with the U. S. National Arboretum and the University of British Columbia Botanical Garden (9). One species specifically targeted for collection was the Asian trumpetvine, *Campsis grandiflora* (Thunb.) K. Schum (Bignoniaceae). Although it has been in western cultivation since 1800 (6), little of the genetic diversity reported in the wild species is available in cultivated materials. Botanically it is reported to exist in a wide flower color range from almost pure yellow, through the normal orangish-red, to almost pure red. One goal of the expedition was to search for better color forms for introduction to the U.S. nursery industry.

Although native to Korea, it is now rare in the wild there and in several months of hunting it was never found except as artificially maintained cultivated plants at farmsteads and in nurseries as collected plants. We have noted that isolated plants are apparently self-sterile and at this extreme low population level it is now maintained almost strictly as cultivated, vegetatively propagated clonal material. *Campsis* vegetative cuttings do not store well with defoliation normal after even one day of collection, and it was found to be impossible to collect in the wild and get viable cuttings back to horticultural facilities in Seoul. An attractive clone was finally successfully collected by digging root pieces and was returned to N.C. for evaluation.

Subsequent growth and spectacular flowering attracted much attention and in 1991 this plant was selected for the North Carolina Association of Nurserymen formal introduction and promotion program. Although the plant is in high demand and sells well when in flower, several production and use issues have arisen which need discussion for nursery industry awareness. Also, the native U.S. species and several horticultural cultivars and hybrids are in commercial trade and their differences and characteristics warrant discussion.

The following taxa of trumpetvines are listed in existing literature:

- *Campsis grandiflora* (Thunb.) K. Schum. - "Chinese Trumpetvine". Native to China and Korea; introduced to cultivation in 1800 and received an Award of Merit from the Royal Horticultural Society in 1949. It can reach 20' with age and develops large coarse pinnate glabrous leaves with 7-9 leaflets. It is a sprawling, clambering plant with few aerial rootlets for a climbing mechanism. With age it develops a woody, shrubby nature and spectacular hundred year-old, 10' diameter plants can be found in the U.S. Flowers are much larger than the native U.S. species reaching 2-4" in diameter with striking orange-red color on the flaring corolla. It flowers as early as June in Raleigh and if seed pods are removed (resulting from hybridization with native populations and other taxa in our collection), flowering will repeat sporadically through the summer into fall. Generally considered less hardy than *C. radicans* with potential use in USDA Zone 7 - but this likely varies with ecotypic variation in where the original germplasm was collected. The Korean material is likely useful in USDA Zone 6.
- *Campsis grandiflora* 'Morning Calm'. Recently the decision was made to distinguish the Korea-collected, NCSU Arboretum (now the JC Raulston Arboretum)-distributed clonal plant which is spreading through the nursery industry by assigning it a cultivar name. 'Morning Calm' was selected to honor the country of origin as Korea is widely known as "the land of morning calm".
- Our main plant (grafted on the native species as understock) is located on the chain link fence south of the farm buildings across from the entrance into the arboretum visitor center.
- *Campsis grandiflora* 'Thunbergii'. A form selected and introduced by Siebold in 1856 which has shorter-tubed trumpets and reflexed lobes - reported as red in one reference (6) and orange in another (5). Although common in most literature, this clone may possibly no longer exist in cultivation.
- *Campsis radicans* (L.) Seem. - "Trumpetvine". Native to southeastern U.S. (Florida to New Jersey and west to Missouri and Texas) and introduced to European cultivation in 1640. Very vigorous and tall growing species which can reach 50' climbing with aerial rootlets ("radicans" = "aerial roots"). Root suckers spread colonies from parent plants. It has foliage with 9-11 leaflets that are downy on the undersides and generally finer-textured than the Asian species. Flowers are red or orange with longer tubular flowers and smaller flaring corollas (1-2" diameter) than the Asian species. Hardy in USDA Zone 5.
- *Campsis radicans* 'Atropurpurea' - "Purple trumpetvine." No details, just listed as a purple-flowering form (11).
- *Campsis radicans* 'Crimson Trumpet' - "Crimson Trumpet Trumpetvine." Described as vigorous, lush deep green leaves and large, deep velvety red flowers (5); possibly a recent renaming of the old 'Praecox'?
- *Campsis radicans* 'Flamenco' - "Flamenco Trumpetvine". A recent clonal introduction in the English market and its distinctive characteristics are not yet in available literature. Recently acquired and now in The NCSU Arboretum (now the JC Raulston Arboretum) collection for future observation.
- *Campsis radicans* 'Flava' (Bosse) Rehd. - "Yellow Trumpetvine". A color variant selected from the wild before 1842 with clear yellow flowers. Received an Award of Merit from the Royal Horticultural Society in 1969.
- *Campsis radicans* 'Judy' - "Judy Trumpetvine" - yellow flowered selection recently introduced by Woodlander's Nursery from a native wild collected form from Johnston County, NC.
- *Campsis radicans* 'Minor' - "Dwarf Trumpetvine." No details, just listed as a dwarf form (11).
- *Campsis radicans* 'Praecox' (Jaeg.) Schneid. - "Scarlet Trumpetvine". A color variant selected from the wild before 1864 with scarlet-red flowers.
- *Campsis radicans* 'Speciosa' (Parsons) Rehd. - "Shrub Trumpetvine". A variant with long-branched shrubby growth, normally a bush, and small orange-red flowers. Selected before 1902.
- *Campsis X tagliabuana* (Vis.) Rehd. - "Hybrid Trumpetvine". The two existing species hybridize readily and the resulting seedlings are variable in nature but intermediate in habit and characteristics between the two parents - first reported in 1858 by De Visiani in the Tagliabue Nursery, Lainate, Italy. Leaflets vary from 7-11 and are intermediate in downy character. Hardiness intermediate between parents - likely USDA Zone 6.
- *Campsis X tagliabuana* 'Coccinea'. Developed by Simon Louis Freres of Plantieres Nursery, Montpellier, France; described as having brilliant red flowers (5,6).
- *Campsis X tagliabuana* 'Guilfoylei'. A recent Australian hybrid introduction - less showy than the better known 'Madame Galen' with smaller red trumpets more like *C. radicans*. Available in the American nursery trade through introduction and sales by Duncan & Davies Nursery, NZ.
- *Campsis X tagliabuana* 'Madame Galen'. The most widely known and grown hybrid clone which was introduced in 1889 by Sahut, Montpellier, France and received an Award of Merit by the Royal Horticultural Society in 1959. Vigorous climber which requires

support. Produces large showy salmon-red flowers in summer.

Propagation can be achieved by seed, softwood cuttings, hardwood cuttings, root cuttings, layering, and budding (2,5) depending on the characteristics of the taxa to be produced and clonal integrity. As N.C. growers worked to meet high market demands it was noted that cuttings from the parent stock plant at The NCSU Arboretum (now the JC Raulston Arboretum) were very difficult to root and slow growing once potted. In 1993 we also became aware of growers reporting plants which grew vigorously but did not flower making marketing more difficult.

Discussions with Greg Grant of Lone Star Nursery, San Antonio, TX who had observed and studied *Campsis* in detail as a personal interest for many years, lead to the previously unreported conclusion that *C. grandiflora* has marked juvenile:adult stages similar to the classic "type plant" for this behavior - *Hedera helix*. Further observation has shown that adult wood has large, coarse foliage with short internodes, is very difficult and slow to root from softwood to semi-hardwood cuttings, and blooms heavily as small plants. Juvenile wood is vigorous with long internodes and foliage a quarter or smaller in size than adult leaves, is very easily rooted from summer cuttings, but does not flower readily as a young plant. Basal sprouts are more juvenile in character and root cuttings produce strongly juvenile growth.

Apparently within the production industry growers are subconsciously selecting for more easily rooted and faster growing wood - which then does not flower for marketing. A grower has reported best success in propagating adult wood by using a 10,000 ppm IBA quick dip on softwood cuttings taken as early in the season as possible just as new shoots emerge. We have grafted (terminal cleft grafts) adult wood to juvenile wood plants produced in commercial container culture and find the adult wood blooms quickly only weeks after grafting, and also that the juvenile wood "rootstock" also blooms within a few weeks later. It is not known at this point how long it will take ungrafted, fully juvenile vines to bloom in the landscape - with estimates ranging from months to several years at this point. Because of the magnitude of concern among our growers, and the unawareness of juvenile:adult propagation:growth issues in *Campsis*, it was felt worthy of announcing through this SNA mechanism for growers to consider and observe. Further information on propagation techniques to successfully propagate adult wood, and information on the time to flowering of juvenile wood in landscape situations is needed.

Recognition should be made of the new cultivar name, 'Morning Calm' recently assigned to the Korea clone introduced to the nursery industry by The NCSU Arboretum (now the JC Raulston Arboretum). The issues of juvenile:adult tissues in propagation and flowering of the Chinese Trumpetvine have not been reported before and growers must address these issues in their production and use of this very beautiful and potentially important nursery crop.

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PLANTS DISTRIBUTED TO NCAN NURSERYMEN

NCAN Short Course and Trade Fair - Asheville, NC - August 29-30, 1992

(Most members who comprise the Friends of The NCSU Arboretum (now the JC Raulston Arboretum) are not in the professional nursery/landscape trade, but are serious gardeners or people who want to support the continuation of the arboretum as a state resource. Beyond the arboretum use as a university teaching resource and display garden for the public, there is also the very important outreach to the commercial industry. Each year plants are taken to the North Carolina Association of Nurserymen's meeting for display, and thousands of plants are also propagated for free distribution as an incentive to try to encourage nurserymen to grow some new crops. To allow our "Friends" to have a feel for this outreach, I am again as for many years, including here the information on plants

distributed at the 1992 meeting as these may be plants which will appear in garden centers for the public in the future - and of course many of the extras from this distribution end up in the autumn members plant giveaway so many of these are now in your gardens under trial.)

Each year a selection of plants from The NCSU Arboretum (now the JC Raulston Arboretum) is made for propagation and distribution to N. C. nurserymen at the summer short course as a means of spreading new or uncommon plants through the state for further observation and perhaps commercial production. This program has been underway since 1980 and ca. 55,000 plants of 260 different species and cultivars have been given to growers since its inception. Selection of plants is based on plant ability to be propagated when the Department of Horticultural Science propagation benches are empty, size of stock plants in the arboretum adequate to allow taking of 200-300 cuttings, and absence in the existing commercial industry. Plants will vary in commercial potential with some having great potential - others merely curiosities for adaptation study or hobbyist collector-type items.

These plants provided for growers represent just a sample of the 5,000 species and cultivars presently growing in The NCSU Arboretum (now the JC Raulston Arboretum). Commercial growers are most welcome at any time to come to the arboretum to collect propagation material to provide stock plants for their operations. We do request for nurserymen collecting plants from the arboretum for the first time, an appointment be made (call 919-515-1192 for J. C. Raulston, 515-5361 for Tom Foley, or 515-1632 for Newell Hancock) to coordinate which materials may be collected and our general guidelines for collection procedures. Dozens of growers now gather many hundreds of thousands of cuttings annually in this manner.

We very much appreciate the long, diligent efforts of a whole team of Friends of The NCSU Arboretum (now the JC Raulston Arboretum) volunteers who spent a full week individually labeling and bagging the 5,000 plants in this distribution. Many, many thanks to Mary Alexander, Wayne Brooks, Tom Bumgarner, Anne Clapp, Suzannel Edney, Alice Figgins, Vivian Finklestein, Lynn Hoyt, Susan Lambaris, Chris Loflin, Joanne McMenamin, Sherri Sattewhite, Bobby Wilder, and Lynn Wilhelm for your help.

- 01. *Agave scabra* Salm-Dyck - "Rough-Toothed Agave" (Agavaceae). The agaves form a large genera of over 300 species of perennial succulents native to the Americas from northern South America into the center of species diversity in Mexico, and on into the southwestern U. S.. They are found from tropical rainforests to the harsh cold and dry plateaus of Utah and grow in a variety of habitats - though most are best in sunny and well-drained environments. Many species are monocarpic - i.e., growing for some years (usually 5-30 years rather than the 100 implied by the name of "century plants") before flowering, with the parent plant dying with offsets and seed to carry on the next generation.

Many of the species are rare in cultivation - and of largely unknown landscape hardiness from lack of trials in colder or wetter areas with most horticulturists growing them as interior plants or for patio tubs for summer use. Many are proving hardier at The NCSU Arboretum (now the JC Raulston Arboretum) than expected. Excellent drainage is important; and overhead cover to keep liquid water out of the crowns of plants during freezing conditions will markedly increase cold tolerance in marginal areas. Propagation is by division of offsets and by seed which germinates readily without any treatment.

This species is reported by the Royal Horticultural Society Dictionary of Gardening to reach 3-5' in diameter with leaves up to 4' in length and to produce flower stalks 18' tall. Hardiness is unknown but the species is native into Texas and is at least not subtropical - possibly USDA Zone 7? Plants in this distribution were grown from seed collected in northern Mexico (T36M-41S-111391) and provided by Yucca Do Nursery (FM 359, P. O. Box 655, Waller, TX 77484) for adaptation evaluation. In the western half of N. C., recipients may want to grow them as a tub plant and move inside in winter until "sacrificial offsets" can be obtained for outdoor hardiness trial.

- 02. *Agave sp.* (Agavaceae). An unknown species collected in mountains of northern Mexico during the Yucca Do Nursery/NCSU Arboretum (now the JC Raulston Arboretum)/L.A. Country Arboretum expedition of late December 1991. Beautiful spheres of blue rosette growth about 1' in diameter. Hardiness unknown - for evaluation trial.
- 03. *Bignonia capreolata* L. 'Tangerine Beauty' - 'Tangerine Beauty Crossvine" (Bignoniaceae). A native southeastern U. S. (New Jersey to Mexico) deciduous to evergreen flowering vine (depending on winter temperatures) found growing wild in almost all counties of North Carolina. Recent taxonomic changes reported in the 1992 Royal Society of Horticulture Dictionary of Gardening have juggled this large complex family of 112 genera leaving this species (formerly *Anisostichus capreolata*) as the only one now in the genera *Bignonia* (named for Abbe Bignon, librarian to Louis XIV) as originally named by Linnaeus. For major confusion, thirty-seven other plants formerly in the genera have now been dispersed in 14 other genera - which we thankfully do not have to worry about here!

The wild species has trumpet shaped flowers with a flared 5-lobed corolla - rusty orange-red on the outside, and tan-yellow on the inside. A beautiful deep brick red-flowered clone, 'Atrosanguinea', has been available from plant nursery specialists for some years. On young vigorous vines in good light, the flowering display in early summer is so dense as to completely cover the foliage of the plant. Leaves are opposite with two leaflets with tendrils which allow the plant to cling to wire or wood trellises as well as tree trunks and wooden or stone walls. Without support it can be grown as a groundcover. It will grow well in both sun and shade, but flowering is much more intense in full sun. Plants are very easily propagated by cuttings under mist at most any time of year and it can grow up to 10-15' per year with good culture - reportedly reaching 70' in the wild!

This "new" cultivar is a reintroduction of a plant which came to The NCSU Arboretum (now the JC Raulston Arboretum) in 1990 as

a cutting from the personal garden of superb plantsman Scott Ogden of New Braunfels, Texas. According to Mr. Ogden, this clone was sold for a short time by Wayside Gardens of Ohio in the early 1950's - and apparently then disappeared from commercial production. I've talked to the current Wayside Gardens firm and they have no corporate records going back to that time to know where it came from or what its name might have been. Our plant is now growing on the patio trellis outside the arboretum office. When it bloomed in the spring of 1992 for the first time, it totally captured everyone who came through the garden for some weeks with a stunning floral display of rich color. The flower color is about half-way between the dusty yellow of the wild species and the dark, brick-red of 'Atrosanguinea' - a rich, ruby tangerine color - for which we named it. It instantly attracted so much grower attention that many nurserymen already have it in production from cuttings taken during the summer - and surely many others will quickly add it in the coming years. Excellent commercial potential. Can be found on the trellis in the Volunteer's Terrace Garden by the arboretum office.

- 04. *Buddleja nivea* Duthie - "Woolyleaf Butterfly Bush" (Loganiaceae). A large genus of over 100 species native to diverse habitats in tropical and temperate Asia, America and Africa. *B. davidii* cultivars make up the bulk of the existing commercial horticulture market for this genus. Most forms in horticulture are grown for their abundant summer flowers of many colors which have rich nectar that attracts butterflies - hence the common name "butterfly bushes". This Chinese species introduced to western cultivation in 1901 is of more interest for the large wooly-grey foliage as a textural accent in the garden. The violet flowers are abundant in long pendant inflorescences - but not particularly notable or showy. It will make a semi-deciduous shrub 6-9' or could be cut to the ground each winter and used as a "involuntary herbaceous" perennial. Hardiness is unknown but it appears likely to be hardy throughout N. C. All *Buddleja* are very easy to propagate from softwood cuttings at anytime such wood is available with fast rooting and subsequent growth.
- 05. *Callistemon sieberi* DC - "Alpine Bottlebrush Bush" (Myrtaceae). A wonderful broadleaved evergreen shrub we have long grown in The NCSU Arboretum (now the JC Raulston Arboretum) and much admired by visitors - but as usual with those plants we are most eager to promote - once again there are these lingering identification problems. The bottlebrush bushes are a group of about 25 species of shrubs to trees native to Australia and are widely seen in commercial landscaping around the world in tropical countries as spectacular flowering plants with dramatic flowers of showy white, yellow, cream, red and purple stamens resembling the "bottlebrushes" of their name. Most are considered useable in USDA zones 9-10, with some use in zone 8 of a few types.

C. sieberi is the hardiest of all the species with literature describing its use down to 0F in certain areas. We received this plant from Woodlander's Nursery (1128 Colleton Ave., Aiken, SC 29801) in the early 80's and were quite shocked when it came through our record cold winters (lowest of ca. -9F) with no injury whatsoever. It is perhaps the most dependably winter hardy of any of the very, very few woody Australian plants we can grow in Raleigh (with *Eucalyptus gunnii* coming in a far distant second). It seems to stabilize in height as about a 4-5' densely branched shrub spreading to 5-7'. It roots relatively easily, though slowly, with good percentage take from hardwood cuttings under mist - but trials need to be made for best commercial timing as rooting does vary considerably through the year.

Now - the taxonomic problem here in distributing this plant - the alpine bottlebrush has yellow stamens - and the plant we have is definitely red - but then none of the red-flowering species are this hardy. *C. citrinus* - "crimson bottlebrush" rates the hardiest of that group, but not as hardy as our plant has shown to be. The Royal Horticultural Society Dictionary of Gardening admits the "species hybridize freely and may not come true" and that "this has also led to much confusion in identification." I suppose if even the august RHS admits it is a confusing and difficult problem, we may be forgiven our uncertainty. Perhaps we have a *sieberi* X *citrinus* hybrid which arose from an index seminum seed from a *C. sieberi* parent in a mixed species arboretum planting - bringing together the red stamens and hardy traits?? We will likely never know for sure - perhaps it should just be marketed as *Callistemon* X 'Woodlander's Hardy Red'. Whatever its name - a very fine and dependable garden plant for at least the eastern two-thirds of N. C. and worthy of trial in the mountains area (perhaps with crown mulching to grow as a dieback shrub). We have a large plant in the mixed border south of the annual trials, and one in the west arboretum at the southwest corner in the agave/yucca bed.

- 06. *Camellia* X 'Cinnamon Cindy' - "Cinnamon Cindy Camellia" - (Theaceae). A broadleaved evergreen shrub with white fragrant flowers introduced by W. L. Ackerman of the U. S. National Arboretum in 1968 as one of the first of many new interspecific hybrids created to get greater hardiness and other combinations of plant and flower characteristics. This hybrid of *Camellia japonica* X *Camellia lutchuensis* was created specifically to add fragrance to flowers of the very familiar commercial *Camellia japonica*. It grows rapidly with almost fastigate growth (our arboretum plant reached 8' and barely 2' in diameter). It blooms in early spring and should be a dependable plant in USDA zone 7 and worthy of trial in a protected location in zone 6. Camellias can be propagated by hardwood cuttings under mist at any time of year.
- 07. *Cercis mexicana* [or *C. canadensis* var. *mexicana* (Rose) Hopkins] - "Mexican Redbud" - (Leguminosae). An outstanding small flowering tree in our trials with small, glossy foliage with undulating margins on the leaves. First introduced to commercial culture in the eastern United States by Stephen Burns of Vine and Branch Nursery (now closed '94), Chapel Hill and slowly becoming known and used. A magnificent plant! Plants being distributed are from Yucca Do Nursery seed collected in Mexico. Juvenile seedling plants do not have the glossy foliage but acquire it as they age. When young this species can be propagated from softwood cuttings; adult wood is usually handled by budding (with some difficulty).
- 08. *Cryptomeria japonica* D. Don. 'Elegans Aurea' - "Winterlime Japanese Cedar" - (Taxodiaceae). *Cryptomeria* is native to Japan, Taiwan, and China and has long been cultivated for its useful fragrant wood and over 200 ornamental cultivars with virtually every imaginable characteristic have been selected by Japanese horticulturists over the last 150 years. It is one of the finest of imported conifers for use in the southeastern U. S. - yet is relatively rare in commercial production. The standard size 'Yoshino' is an outstanding ornamental and is increasingly grown.

Among the cultivars, 'Elegans' is one of the most distinctive with soft, feathery juvenile foliage which turns a violet purple in winter making it useful as a winter accent plant. 'Elegans' was imported to England from Japan in 1854. The cultivar 'Elegans Aurea' which we are introducing here seems to not be in the American commercial market at this time. It has the same feathery juvenile foliage and is distinguished by turning a bright chartreuse lime green in winter (in sun) with normal dark green foliage in summer. According to Welch it originated in New Zealand and has moved via collectors to various areas. My first view of it was at the University of British Columbia Botanical Garden in a mixed planting with 'Elegans' during winter months in a stunning combination of purple and chartreuse. Our first two cuttings brought back from there a few years ago have slowly been built to numbers for release this year. Very easy from hardwood cuttings under mist at any time of year with rapid rooting, and subsequent rapid growth. We have a hedge of this cultivar in the winter garden.

- 09. *Eucomis comosa* (*punctata*) Houtt. - "Pineapple Lily" - (Liliaceae; Hyacinthaceae in some references). A herbaceous bulb native to south Africa which has proven hardy in the Raleigh area, and a most attractive perennial with 2-3' tall summer inflorescences of greenish-white flowers tinted pink or purple on stems spotted purple. A perennial in zone 7-9, but will probably require lifting and storage in the mountains. Very easy and fast from seed (as these were produced), or can be propagated by division of bulb clumps.
- 10. *Hedera nepalensis* K. Koch.- "Nepal Ivy" (Arailaceae). A rarely cultivated species of broadleaved evergreen climbing vine (or groundcover without support) which has performed very well in The NCSU Arboretum (now the JC Raulston Arboretum) plantings for some years with foliage distinctively different from other ivies currently in commercial trade. As the plant ages with growth up posts or trunks - the small leaves seen on these distribution plants increase in size to 7" with a lance shaped leaf with an undulate margin. When adult wood is produced (at a certain age and height in a tree), the fruit are showy orange-red in color instead of the black of English Ivy, *Hedera helix*. Untried enough that hardiness is not fully determined at this point. The RHS dictionary rates it as USDA zone 8, but with the heat of the southeast we generally pick up at least one zone increased hardiness over English ratings. It seems fine in zone 7 and will have to be tried in the mountains.
- 11. *Hydrangea paniculata* Sieb. 'Unique' - "Unique Hydrangea" - (Hydrangeaceae). A very widely grown deciduous flowering shrub native to Japan, China and Taiwan which was introduced to western culture in 1861. They generally form 6-12' diameter shrubs and are covered in white flowers in summer. Many cultivars have been developed which vary in bloom time ('Praecox' the earliest in early summer, through 'Grandiflora' in mid-summer, to 'Tardiva' in autumn), and color and size of panicle. This cultivar being distributed is a recent introduction in England which was brought to The NCSU Arboretum (now the JC Raulston Arboretum) by Mr. Richard Hartlage several years ago. It is noted for having the largest inflorescences of any of the *H. paniculata* cultivars, at times reaching 18" in length looking much like an oak-leaf hydrangea. Its subsequent fine performance with spectacular flowering at the arboretum made it an obvious choice to propagate to introduce to the U. S. market. In 1990 it received the prestigious Award of Merit from the Royal Horticultural Society in England. One of the easiest of plants to propagate - it roots anytime during the summer with softwood to hardwood leafy cuttings under mist - and anything from a single-node cutting to a 2' branch can be stuck. It blooms on new wood, and newly rooted cuttings will bloom the first year (ours did in the prop bench!). Found in the mixed border east of the rustic arbor.
- 12. *Hypericum galioides* Lam. "Florida St. Johns-Wort" - (Hypericaceae). A profuse flowering southeastern U. S. native shrub found from Delaware to Florida and west into Texas. It grows to 3' in height but is more commonly seen at about 2' and spreading to 4'. In late summer it is completely covered with small yellow flowers for over a month. The peeling reddish bark is very attractive in winter. The foliage is thin and narrowly linear with a fine texture in the landscape, and it will be semi-evergreen in milder climates (postscript - remained evergreen in this past winter's 0F in full sun). Although this plant is native across the entire coastal plain of N. C., we received our original plant from Woodlander's Nursery in Aiken, SC., who were likely the first to produce and offer it for sale commercially (as with so many other fine overlooked native plants). Like most hypericums, propagation is very easy by rooting of softwood cuttings under mist at any time of year. Hardiness is unknown but it should be fine throughout the Piedmont and coastal plain in USDA zone 7; we'll have to see what it does in the mountains in zone 6. Located in the north bed at the front of the lath house. Continues to be a truly outstanding ornamental plant and deserving of widespread commercial production.
- 13. *Ilex crenata* Thunb. 'John Nosal' - "John Nosal Japanese Holly" - (Aquifoliaceae). Japanese holly needs no introduction to the N. C. nursery trade as one of the most common and profitable of landscape plants in the state. There are innumerable cultivars varying widely in form, shape, speed of growth, color of foliage and fruit, etc. This cultivar as thicker foliage, heavier texture, and darker green color than other cultivars - and with its distinctive upright growth it is a good candidate for a handsome specimen evergreen shrub in the landscape or for use in hedges and screening. Like all Japanese hollies - very easy to root from cuttings at any time of year. Located on the right as one leaves the White Garden in the collection of Japanese holly cultivars.
- 14. *Jasminum officinale* L. - "True Jasmine, Common Jasmine" - (Oleaceae). A deciduous shrub native to Asia Minor, Nepal and China and long grown for its ornamental and highly fragrant white flowers. The plant at The NCSU Arboretum (now the JC Raulston Arboretum) now spreads some 8' wide and about 3' high with willowy and vinelike branches which will indeed behave like vines when given a trellis to grow on. The heaviest bloom occurs in late spring, but they seem to produce sporadic bloom throughout the summer as well when growing well. Rated as USDA zone 7 in hardiness. Very easy from softwood cuttings under mist and grows very rapidly as soon as rooted.
- 15. *Michelia X skinneriana* - "Skinner's False Magnolia" - (Magnoliaceae). The Michelias are broadleaved evergreen shrubs with fragrant flowers from southeast Asia and most are too tender for dependable use in N. C. - and even the hardiest, *M. figo* is only useful in the eastern part of N. C. Over the last decade a fair assemblage of various species, hybrids and cultivars have somehow accumulated in the arboretum - probably as a result of the very mild recent winters which have allowed their survival better than would have occurred in the 1970's. This plant is not in the horticultural literature and apparently is one of the hybrids which Dr.

Skinner (of the Morris Arboretum in Philadelphia and the National Arboretum in DC) experimented with. It has grown well for us, and propagates easily from hardwood cuttings - so we are sending it out for adaptation trials. It will probably only be hardy in the eastern half of the state (if indeed even there when "normal" winters return) - but like many other plants in our program - we won't know until we try. The flowers are small and white like miniature magnolias - not showy at all down in the foliage. It has the potential to become a 20' tree where adapted. ('94 postscript - the winter of '93-94 gave us a better evaluation of this group and this hybrid was one of the more severely injured - but survived and has grown back for further use and bloom.) Located in the lath house at the west side with the golden hostas.

- 16. *Morus* sp. 'Nuclear Blast' - "Nuclear Blast Mulberry" - (Moraceae). Certainly this deciduous shrub is one of the more unusual novelty plants we have distributed over the years with its very finely dissected lacy foliage. We can safely say this is a collector plant and will probably not impact the K-Mart/Wal-Mart merchandising channels! It originally came to us from Mr. Baldassare Mineo of Siskiyou Rare Plant Nursery (who were likely the first to produce and offer it for sale commercially (as with so many other fine overlooked native plants). Like most hypericums, propagation is very easy by rooting of softwood cuttings under mist at any time of year. Hardiness is unknown but it should be fine throughout the Piedmont and coastal plain in USDA zone 7; we'll have to see what it does in the mountains in zone 6. Located in the north bed at the front of the lath house. Continues to be a truly outstanding one greenhouse one day commented the plant looked like it had been hit by a nuclear blast and the name suddenly seemed completely appropriate and stuck quickly. It actually is a very interesting textural plant - like another version of a 'Trost Dwarf' birch - yet much easier to propagate and grow. Softwood cuttings root very quickly and grow off surprisingly rapid considering how little leaf blade area there actually is to manufacture food for growth. Hardiness is completely unknown at this point - but should go anywhere in N. C. considering the species it could be represented by. ('94 postscript - came through the winter of '93-94 to 0F with no problems - though others have found it not to be so tolerant).
- 17. *Pinus brutia* Tenore - "Turkish Pine; Calabrian Pine" (Pinaceae). The pines are a very large and diverse group of roughly 110 conifer species which come from the full climatic spectrum of environments. They are found throughout the northern hemisphere in the Americas, Africa, Europe, and Asia. This species is native to southern Europe and the middle east from Greece through Turkey to Lebanon and reaches nearly 100' in height in the wild with great drought tolerance. Adaptation in the southeast U. S. is unknown and we have not yet grown it outdoors in trials. The RHS reports it to be hardy to USDA zone 7. Plant where well drained for best possible success and in full sun.
- 18. *Pittosporum heterophyllum* (Lindl.) Beer. "Chinese Pittosporum"- (Pittosporaceae). The pittosporum of commercial commerce in the U. S. is *P. tobira* which is marginally hardy in USDA zone 7 and used fairly widely in zones 8-10 as a standard landscape broadleaved evergreen shrub with white fragrant flowers. It does well in the coastal areas of N. C., and is grown in the Charlotte and Raleigh area but suffers damage in the more severe winters in those areas. Most of the many varied pittosporums used in England are cultivars of *P. tenuifolium* which have not been very successful or useful in the U. S. In looking at this group over the years, it was not until recently that I finally realized there are two major geographic areas of origin of this genera - New Zealand and China. It is almost a iron-clad rule that woody plants from New Zealand will not work in the southeast U. S. - but of course Chinese plants are well adapted and a standard staple. It turns out *P. tobira* is a Chinese/Japanese species and I began to wonder if other species from this area might be available and work here. We now have collected several which are showing promise in the early stages.

The plant being distributed originally came to us in the early 80's from Brookside Gardens, Wheaton, MD as an unknown cultivar supposedly of *P. tobira* - but finally it was identified as *P. heterophyllum*. It has been in the arboretum through all the record low winters and was uninjured when *P. tobira* was killed. It has promise to be an alternative to what has been used, and to extend the range of this genera much farther west in the state - so we are sending it out for trial. Easy from hardwood cuttings any time of year under mist. Our plant has reached 5' in height and probably has the potential to go to 10' or so with time. White fragrant flowers. At the outside northeast corner of the lath house.

- 19. *Platanus mexicana* Moric. - "Mexican Sycamore" - (Platanaceae). A rapid growing deciduous shade tree from northern Mexico which reaches 60' in height in the wild. Came to us from Yucca Do Nursery in Waller, TX from their Mexican plant explorations for adaptation trials. Has been grown so little in cultivation that little is known about it - probably hardy in USDA zone 7 or 8 to 9 - but only testing will tell. Like other sycamores - fast growing. Seed propagated but can be handled by softwood cuttings (heavy mist to prevent desiccation) if seed are not available.
- 20. *Prunus mume* Sieb. & Zucc.'Peggy Clark' - "Peggy Clark Flowering Apricot" - (Rosaceae). I need not go into detail here on a plant I've preached and talked about endlessly over the years. A deciduous flowering tree from Japan with its distinctive characteristic of flowering in mid-winter (1992 they flowered from pre-Christmas until March - over 10 weeks of glory!). Many cultivars exist and this is one of the commonest in U. S. trade with showy, large pink fragrant flowers. The plant is hardy throughout N. C. - and flower display dependability will vary from coastal areas where they will be good almost every year to the mountains where they will be more chancy with rare perfect bloom (1992 would have been fine). A tree to 20' in diameter and very fast growing when young. Can be propagated by seed for the species; or by softwood cuttings (as we did here) under mist in summer, or by budding on purple-leafed plum understock. Super plant!
- 21. *Rhododendron* (Azalea) X 'White Nymph' - "White Nymph Dwarf Azalea" - (Ericaceae). A true dwarf evergreen azalea which was developed by the U. S. National Arboretum some years ago and distributed around the country for trial and production. It does not fit "commercial nursery trade" well with its very slow, compact growth which makes resulting plants expensive while still small - something the average azalea buyer looking for a dollar gallon will not understand. It is a very fine connoisseur or rock garden plant growing about 2-3" a year in our experience - with our parent plant now perhaps 8" tall and a foot in diameter. The 1"ball" being distributed is a year-old rooted cutting. Pure white flowers cover the plant in spring. Culture and handling as for all azaleas -

just be patient. There are other similar plants in this series with varied flower color - which we have in the arboretum if anyone is interest in cuttings to grow. Located inside the entrance to the lath house.

- 22. *Salix daphnoides* Vill. - "Violet Willow" - (Salicaceae). A very widely distributed deciduous tree native from Europe to central China into Tibet. The common name applies to the reddish-brown branches which have a waxy blue bloom to them. It can be a medium sized tree reaching 30' in height or can be pollarded to the ground frequently to grow for the "pussy willow" catkins which are very showy on this species. Mr. Gary Koller of the Arnold Arboretum rates this as one of the most beautiful willows and it is deserving of a place in the ornamentals market. It is hardy anywhere in N. C. and is very easily propagated by either hardwood cuttings in winter, or with leafy softwood cuttings under mist in summer.
- 23. *Styrax japonicum* Sieb. & Zucc. 'Crystal' - "Crystal Japanese Snowbell Tree" - (Stryacaceae). Over the years of testing at The NCSU Arboretum (now the JC Raulston Arboretum), the Japanese Snowbell has been one of our very best small deciduous flowering trees (also native to China and Korea). It is normally seen at 15-30' in the landscape with white fragrant flowers hanging down from the branches in late spring. It is adaptable for use throughout N. C. In evaluating seedlings from our 1985 Korean expedition, this individual plant received much favorable attention from professional plantsmen from around the country and we decided to name and release it for commercial production - with this the first formal release of the plant. It's unique differing characteristic is very dark black-green foliage and purple pedicels on the flowers which frame and highlight the abundant bright white small flowers quite dramatically. The flowers have variable petal number of 3-9 petals (normal 5) and are fragrant. Liner producers who have done early trials with it find it the easiest to root of all the cultivars of this species, with fewer problems of overwintering the newly rooted cuttings, and fast growth in production. As a vigorous young plant in production it sporadically flowers throughout the growing season. Located in the west arboretum across the walkway from the 'Fantasy' crepemyrtle.
- 24. *Viburnum tinus* L. - "Laurustinus" - (Caprifoliaceae). A very beautiful broadleaved evergreen shrub native to the Mediterranean area of northern Africa and southern Europe. It has long been used as an ornamental in the southeastern U. S. in zones 8-9, and less frequently in zone 7 where it can periodically be damaged in the more severe winters. We were inspired to propagate and distribute this plant as it has been so spectacularly beautiful in the arboretum in recent years. We originally acquired it on a "rescue mission" on an old home in Raleigh that was being demolished. The plant had been there many decades and was close to 15' tall with tree-trunk size stems. We sawed it off at the ground and moved a manageable ball and regrew the plant after moving. It is a very good clone with bright red, showy flower buds through the winter, opening to white flowers in spring. Extremely easy to propagate and fast growing. Of good commercial potential in the eastern half of the state - and can be used as a tubbed sunporch plant in colder areas.
- 25. *Vinca minor* L. 'Gertrude Jekyll' - "Gertrude Jekyll Periwinkle" - (Apocynaceae). Small-leaved periwinkle is one of the most common of evergreen groundcover plants in the nursery industry and is grown from New York to Florida and coast to coast. Many cultivars exist but are less commonly seen in commercial production. This is one of the finest named in honor of the great English plantswoman of this century. This cultivar has smaller foliage and finer texture than standard species periwinkle, and pure white flowers in early spring. It will be hardy and useful for landscaping anywhere in N. C. and is best adapted to lightly shaded areas. Propagation is by softwood cuttings at any time of year for by division of layered runners in established plantings. We are indebted to Mr. Marco Stufano of the noted Wave Hill Garden, New York City for providing us with the cuttings for this distribution.

BOOKNEWS

The megabookstores are exploding across the country with a half-dozen appearing in the Triangle area in the last year or two. But there is still the magic of the smaller bookstores and those that carry pre-owned loved books of special interest. For those traveling to the mountains of N. C. - in Asheville I highly recommend a stop at: The Captain's Bookshelf, 31 Page Avenue, Asheville, NC 28801 (704-253-6631) - open M-F 10-6 and Saturday 10-5. When there tell Chan & Miegan hello and regards from The NCSU Arboretum (now the JC Raulston Arboretum) - wonderful people and fabulous books!

The Northwest Gardeners' Resource Directory by Stephanie Feeney (ISBN 0-9639853-0-2) - 108 p. is an essential guide for anyone planning on traveling to the Pacific Northwest with detailed guides to every conceivable horticultural point of interest in that region. \$12 from Cedarcroft Press, 59 Strawberry Pt., Bellingham, WA 98226

Several review surveys of horticultural books read and used in the U. S. have recently appeared and are well worth hunting out as guides to many more books for one to seek and read. Richard L. Bitner surveyed 28 horticultural notables and asked them "which three books have you read that have changed the way you garden or look at gardens?" and published a wonderful article, Books that Change the Way We Garden in: The Green Scene (membership publication of the Pennsylvania Horticultural Society): November 1993 - p. 16-23. Somehow I was included in this august group and my three choices (as usual I can't confine myself and did four of course - sigh!) were those indicated by asterisks in the following list. Some 69 books were cited by the various gardeners - with The Essential Earthman* (Mitchell) receiving the most votes, and America's Garden Book (Bush-Brown), The Gardens of Winterthur (Bruce), Green Thoughts - A Writer in the Garden (Perenyi), Hillier Manual of Trees and Shrubs*, 100 Great Garden Plants (Frederick), Perennial Garden Plants (Thomas), Second Nature: A Gardener's Education* (Pollan), The Secret Garden* (Burnett), A Southern Garden: A Handbook for the Middle South (Lawrence), The Tropical Gardens of Burle Marx (Bardi), and Vita Sackville-West's Garden Book (Joseph) as runners up.

In preparing this, I discovered in the computer archives my memo to him giving the reasons for my choices as follows:

MEMORANDUM: FROM: J. C. Raulston; SUBJECT: My Three Books of Influence; DATE: 6/15/93

1. (Psychology Influence) The Secret Garden - A book read as a child in grade school - and not fully appreciated until therapy work in my 40's when I began to understand that gardens and plants are in the book, and were in my life, safe places to experiment and grow without the threat sometimes inherent in adult human contact. Gardens (especially "Secret" Gardens) can be places to experiment and learn without fear of failure, without criticism, without expectation levels. (And of course, highly fashionable styles and "serious gardener" competition can reinstate all those judgement pressures and slowly and exorbitantly crush the pleasure of true gardening in adulthood; I'm having a hard time now with the seemingly prevalent "competition" gardening I see so many places. Isn't it for fun and the joy of plants????).

2. (Technical Influence) The Hillier Manual of Trees and Shrubs - discovery of this English nursery book in my late 30's (in my 3rd or 4th career) exponentially expanded my awareness of the range of woody plant species and cultivars that existed. And that of course set new challenge levels to try to find (and acquire) them all - and to experiment to learn their adaptation to conditions in the eastern United States - a challenge which continues to the present and for an infinite future. The child in me still is awed that this strange person trapped in an adult body is now working with trials of plants which are not yet in any of the plant reference books! (And to this category of service in professional knowledge of woody plants - I would have to add as essentials, Durr's Manual of Woody Landscape Plants and the German Krusmann 4 volume set of woody plant manuals as daily fondle & dream fodder.)

3. (Crackling-Fireplace-With-Buttered-Popcorn Pleasure of Reading Influence) The Essential Earthman by Henry Mitchell - a book with wonderful wit and satire surrounding first-hand experience knowledge of the joys and tribulations, the nobility and the foibles of compulsively addicted gardeners. The line "It is not nice to garden anywhere, everywhere there are ----" cannot be matched for bold, honest truth. As I head into the seventh repeat reading of my worn copy (thanks to the unexpected pleasure of an aging forgetful mind which allows re-experiencing of old material with the freshness of the first encounter) - I will again chuckle and wonder and learn from this marvelous book.

"Influence Book" Runners-Up in the Array of Thousands of Books Encountered and Owned:

Walden - Henry David Thoreau (what do we want from life?)

Encyclopedia of Horticulture - Liberty Hyde Bailey (the absolute bedrock gospel of horticulture in college in the 60's - immensely influential to my store of knowledge)

Shattering - Food, Politics, and the Loss of Genetic Diversity - Cary Fowler and Pat Mooney (food crop version of the destruction of massive plant communities in the tropics today)

The End of Nature - Bill McKibben (All the world is now a human controlled "garden" - "nature" no longer exists anywhere untouched by humanity - not a pleasant book)

Second Nature - Michael Pollan (the adult version of the psychology of why we garden and what it means. An outstanding work and my favorite new "reading" book of the last several years - given to many friends as gifts)

The Avant Gardener (monthly periodical highly recommended many times here) did a special issue on books which included their summary of The 25 Best Books of the Past 25 Years. To get this special issue - send \$2 to: The Avant Gardener, P. O. Box 489, NYC, NY 10028 (and while at it - go ahead and take out a subscription).

And Horticulture Magazine did a review, Home Grown and Hardy by Teri Dunn in the November 1993 issue: p. 18-24. This excellent review covers 22 speciality magazines and "small journals for the voracious gardener." Because of varied interests each gardener will find their own selection (I get only 7 of them, and am feeling guilty now) - they vary from speciality crops (Chile Pepper for "hard-core hot-pepper fans") to geographic topics (Carolina Gardener, Texas Gardener, Rocky Mountain Gardener, etc.). A new one we've not had the opportunity to cover here (with our long, long absence) is Allen Lacy's Homeground, \$38/year, Box 271, Linwood, NJ 08221. Well known to our audience as a friend and long-time supporter of the arboretum, and a magnificent writer of many books- this new journal is highly recommended for those who love fine plants and beautiful use of language.

While visiting the large (and really dangerous) bookstore in the gift shop at the Old Sturbridge Museum in Massachusetts recently, I came across a useful and unusual travel guide. Most museums focus on the political, social, and technological aspects of history - and the specialized areas of agricultural developments, people and crops are often overlooked and the tools and techniques are not saved and preserved. This guide - Farm Museum Directory - A Guide through American's Farm Past is a 65 page book listing museums throughout the U.S. which focus on agriculture - steam machinery, heritage animal breeds, living example farms, etc. The retail price was \$4 - and it could likely be obtained for some mailing fee from the publishers - Stemgas Publishing Co., PO Box 328, Lancaster, PA 17608. Locations, times of opening, descriptions of activities, items featured, and contact addresses are given for a remarkable array of museums.

North Carolina has 8 locations featured: The American Minor Breeds Conservancy (919-542-5704 - Pittsboro); Aycock Birthplace State Historic Site (919-242-5581 - Fremont); Duke Homestead and Tobacco Museum (919-477-5498 - Durham); Horne Creek Living Historical Farm (919-325-2298 - Pinnacle); Old Salem, Inc. (919-721-7329 - Winston-Salem); Old Time Historical Museum (910-685-4253 - Climax); Tobacco Farm Life Museum (919-284-3431 - Kenly); and Windmill Acres Farm (704-465-2232 - Newton).

(I didn't escape that easily - I also ended up with a children's book on the history of Johnny Appleseed - with more facts than I had seen elsewhere; The Journals of Lewis and Clark, edited by John Bakeless; and four of the six volumes in The Everyday Life in America Series edited by Richard Balkin and published by Harper & Row - Everyday Life in Early America, The Reshaping of Everyday Life 1790-1840, The Expansion of Everyday Life, 1860-1876; Victorian American, The Uncertainty of Everyday Life, 1915-1945, and As Various as Their Land. Sigh - too many books, too little time! But I am down to the last one already).

Also while on the museums theme: I was amused by the following quote in a News & Observer (local newspaper) review of the newly opened N.C. Museum of History in Raleigh which alluded to a concern often discussed in the AABGA world on how to interpret collections. "Throughout the museum, the contemporary museological impulse for audiovisual and interactive exhibits has been indulged to maximum effect and annoyance." (Chuck Twardy)

And while on travel as a topic, I'll include A Guide to Mid-Atlantic Gardens (DC, DE, MD, NJ, NC, PA, & VA) by Jack Dempsey (\$16.95) - 200 pages with over 100 gardens described (with 21 in N.C.) - very useful reference to use when traveling the region. In addition to interesting sections on each garden describing an overview, directions, historical profile, description and a table of garden offerings available (food, phones, plant sales, etc.) - he also has a section on his personal impressions. The NCSU Arboretum (now the JC Raulston Arboretum) gets the following review: "My gleeful reaction to the Arboretum was that I had fortuitously stumbled onto a fantastic garden playground. There is no overall design for the Arboretum (?!?) with a unifying theme, there is just plenty of everything, one thing after another, each item and each area being a fascination unto itself. Everything is beautiful and well-kept and, at least during my visit, everyone there was in high spirits. This is a happy, playful place in addition to being an innovative, diversified, pioneering garden." (Thank you Jack, JCR). Available from: Center for Creative Expression, P. O. Box 210, Kitty Hawk, NC 27949 (1-800-553-5424; FAX 919-441-1867) - \$16.95 + 6% tax for N.C. residents + \$3.95 handling for one book).

Public Gardens of Georgia - released as a 36 page directory and a 117 minute video covering 28 gardens and garden areas in the state. \$29.95 + \$3.50 for the video, \$4.95 + \$1 for the directory from: McKinney Video Productions, 613 Silver Circle, P.O. Box 3098, Dalton, GA 30719-3098 (706-272-1034)

And two other travel leaflets here (which could equally have gone in the plant sources section) - Herb Gardens and Farms of North Carolina a free leaflet from the N. C. Herb Association, 2016 Fanning Bridge Rd., Fletcher, NC 28732. It describes and gives addresses and phone numbers for 39 herb gardens and dealers one would enjoy visiting. Serious herbophiles should join the very active association - attend meetings receive mailings - only \$25 for individuals. An excellent similar guide is available for Vermont - Perennial & Herb Display Gardens Open to the Public (very detailed information) - from Univ. of VT Extension System, Horticulture Research Center, Dept. of Plant and Soil Science, Univ. of VT., South Burlington, VT 05405 (802-658-9166).

Catalogues to large selections of books:

Oxford University Press, 200 Madison Avenue, New York, NY 10016 (1-800-230-3242; FAX 919-677-1303). Technical references with various ones relating to horticultural science.

Food Products Press, The Haworth Press, Inc., 10 Alice Street, Binghamton, NY 13904-1580 (1-800-342-9678; FAX 607-722-6362). Covers growing and production of fruit, vegetables, herbs, wine, and also has such eye-catching titles as: Chocolate Fads, Folklore & Fantasies ("no more bad mouthing chocolate! Read about chocolate's nutritive - even curative- properties and positive personality attributes of chocophiles"; \$9 billion in chocolate sold last year!)-\$32.95; The Food Catalog - The Ultimate Guide to Buying Food by Mail: From Arborio Rice and Dungeness Crab to Walla Walla Onions and Zucchini Pickles by Wiegand (\$29.95); and such practical things as Uncommon Fruits Worth of Attention - A Gardener's Guide by Lee Reich (\$29.95).

The University of Arizona Press, 1230 N. Park Avenue - Suite 102, Tucson, AZ 85719 (1-800-426-3797; FAX 602-621-8899). Interesting books on alpiners and southwest desert plants (with such unexpected concepts there as a guide to Truffles of the Southwest - not a plant one would associate with that region). I have long been fascinated by the important scientific contribution of the concept of dating of archeological items by radiocarbon dating which was made possible by the study of tree rings in Bristlecone pine and other trees - here documented in several books on Dendrochronology and biographies of Dr. A. E. Douglass who founded this science. This catalog is also the source of one of the most powerful and significant books I've read in recent years - comparable to Rachel Carson's The Silent Spring of the 60's - but which has not garnered the attention it deserves (though it won the "alternative nobel prize") - Shattering: Food, Politics, and the Loss of Genetic Diversity by Cary Fowler (a N.C. "resident" - but now world-wide citizen as he travels, studies, and lectures) - the story of what is happening to loss in genetic diversity world-wide on our food crops as we go to corporate controlled genes and new biotechnology. Very strong and important book that I highly recommend! (\$24.95 originally but on sale in a recent catalog for much less).

The University of Chicago Press, 5801 South Ellis Avenue, Chicago, IL 60637 (1-800-227-1994).

Landscape Architecture Foundation (ASLA), 4401 Connecticut Avenue, NW - Fifth Floor, Washington, DC 20008 (202-686-2752; FAX 202-686-1001). Dozens of specifically landscape related items - some of recent interest to me included: Jens Jensen: Maker of Natural parks and Gardens (\$34.95), and Siftings (\$13.60)- the pioneer American focusing on native plants in the landscape - the first time that good information has been easily available about his life and influence - highly recommended; Modern Landscape Architecture - Redefining the Garden by Jory Johnson (\$51; exciting contemporary moves in the field - finally some American gardens!); Meaning of Gardens by Randolph Hester (\$41.50 - 30 thinkers philosophize about the modern landscape); Contemporary Landscapes in the World

by Process Architecture (\$120 - ouch!; 97 works in 18 countries); Landscape Plants for Eastern North America by Harrison Flint (\$83.95; on my list of the dozen most recommended reference books on woody plants - often overlooked because of the price and lack of glitz color - but an exceptionally fine reference on trees and shrubs that deserves greater awareness and useage); and hundreds of others.

San Luis Video Publishing, P. O. Box 4604, San Luis Obispo, CA 93403 (805-545-5426; FAX 805-545-5423). Professional training books and how-to videos from one of the finest hands-on horticultural education programs in the U.S.

Winrock International Agribookstore, 1611 North Kent Street, Arlington, VA 22209-2134 (703-525-9430; credit card orders 1-800-269-7390; FAX 703-525-1744). "the information age has seen the proliferation of knowledge explode beyond people's ability to keep track of important recent publications in their field. Time and awareness are the greatest constraints The Agribookstore catalog is an indispensable source of many of the latest, more practical and relevant books to help keep professionals informed and provides a selection of practical how-to books for field level research development and extension workers. It provides access to publications from a wide variety of major publishers through one address, which is especially useful for organizations and individuals working in rural areas or abroad." The Environmental Network Newsletter. I find this an excellent way to keep up with a huge number of books coming out from dozens of publishers - and in addition they can provide in one place a central point to order all these books. (Where else would one see an announcement for Butterfly Farming in Papua New Guinea?)

World Resources Institute, 1709 New York Ave. NW, Washington, DC 20006 (1-800-822-0504). Fascinating world-oriented listing of publications relating to biodiversity, global management in agricultural systems. Useful teachers and researchers resource.

Quest Rare Books, 774 Santa Ynez, Stanford, CA 94305 (415-324-3119) offers wonderful speciality catalogs for Garden, Design, History and other Delights with hundreds of out-of-print pre-owned books. Dangerous to go through this one without restraint and a good credit limit on the credit card! (Such goodies as a signed edition of Robinson's The Wild Garden at \$285, Hooker's A Century of Ferns at \$700, but most are in the \$25-50 range - terrific!)

Timber Press, 9999 S. W. Wilshire, Suite 124, Portland, OR 97225-9962 (1-800-327-5680; FAX 503-292-6607). Always a winner in the best of new horticultural books publishing the widest array of such items in the U.S. at present. Some exciting new entries include: Ornamental Shrubs, Climbers and Bamboos by Graham Stuart Thomas \$49.95 (and three other Thomas books), Iris of China by James Waddick and Zhao Yu-tang (\$27.95), The World of Magnolias by Dorothy Callaway (\$44.95), Maples of the World (WOW!) by van Gelderen, de Jong, Oterdoom and van Hoey Smith (\$59.95), The Gardener's Guide to Growing Hellebores by Rice and Strangman (\$29.95), and many, many, many others.

Brooks Books, P.O. Box 21473, Concord, CA 94521 (510-672-4566; FAX 510-672-3338). Similar to the above except specializing only in botany and ornamental horticulture books - always full of wonderful and tempting items. A recent highlight was their unique offering of two China-published books: China Plant Red Data Book; Rare and Endangered Plants. Vol. 1 (extraordinary book with photos of endangered species in China - an instant checklist of lush plants that desperately need to be preserved in cultivation and propagated widely for use - many down to a single specimen in existence; the photos are stunning.) and The Endemic Genera of Seed Plants of China (with the most diverse temperate zone flora in the world - 301 families, 3,116 genera and over 25,000 species - the unique endemic plants make a fascinating study for any plantsman - \$98.95).

Patricia Ledlie Bookseller, Inc., One Bean Road, P.O. Box 90, Buckfield, ME 04220 (207-336-2778) - again wide range of out-of-print books with a separate catalogue on Natural Science, Conservation, Biology and Horticulture subjects.

Edward R. Hamilton, Bookseller, Falls Village, CT 06031-5000. Another excellent New England book source I've used over the years. Earlier this year he had a remaindered special on the magnificent William H. Frederick, Jr. book - The Exuberant Garden and the Controlling Hand: Plant Combinations for North American Gardens (originally \$50; remaindered for \$24.95 + \$3 handling - give order code #1 14L5-C to order if still available). Newly added to my list of the most critical books a plantsman requires in their library for useful information. Packed with photos, tabular information of wide variety and usefulness, and superb garden and design philosophy.

Raymond M. Sutton, Jr., 430 Main Street, Williamsburg, KY 40769 (606-549-3464; FAX 606-549-3469). Again, periodical catalogs on Gardening, Landscaping, Wildflowers, Orchids, Ferns, Fruits & Vegetables and Herbals. Mr. Sutton has brought books to various plant society meetings in N.C. over the last decade and it is always an exciting event to see his choice selection of out-of-print books.

Elisabeth Woodburn Books, Booknoll Farm, P.O. Box 398, Hopewell, NJ 08525 (609-466-0522). Until her recent death, Elisabeth Woodburn was perhaps the best known of horticultural book personalities in the U.S. with an exceptional collection and service of dealing in out-of-print garden-related books. Thankfully the business has been passed on to good hands and continues as a service to American plant lovers. Always wonderful catalogs.

And one the "local" scene - we must never forget our outstanding Triangle press: The UNC Press, P. O. Box 2288, Chapel Hill, NC 27515-2288 (1-800-848-6224; FAX 919-966-3829). The 7 horticultural books offered are all classics necessary in any good gardener's library - from the Elizabeth Lawrence reprints to Successful Southern Gardening by Sandra Ladendorf, Growing & Propagating Wild Flowers by Harry Phillips, Growing With Gardening (Horticultural Therapy) by Bibby Moore, The Traveler's Guide to American Gardens by Ray and Nicholls, and the new and outstanding Growing and Propagating Showy Native Woody Plants by Richard E. Bir. There are lots of propagation guide for homeowners on herbaceous materials but precious little information for the woodies - and specifically of the remarkable range of outstanding native shrubs and trees of the southeastern U.S. This widely acclaimed book by Dick Bir, a faculty

member of NCSU stationed at the Mountain Horticultural Crops Research and Education Center in Fletcher, NC (western NC near Asheville) answers that void wonderfully. Written by an extremely knowledgeable plantsman in a practical, clear practical manner - highly recommended (\$29.95).

Specific Individual Books Noted or Received.

The Hillier Manual of Trees and Shrubs. This and Dirr's Manual are probably the two books I touch most in my life with a rare day when I'm not in one or the other or likely both - and have literally worn out several copies of both. It has been very exciting to have a new edition of this reference which includes over 1400 new plant entries - now covering over 9000 trees, shrubs, conifers, climbers and bamboos in over 650 genera. In addition to the specific plant information - it is also a very useful reference with a wide variety of articles and reference guides to selection of plants, nomenclature, plant hunters, etc. In recent years a variety of other "Hillier Manuals" have been published in England - but their color photographs and beguiling titles belie the fact that none remotely come close to having the huge wealth of information the the original version contains - now further improved in this new edition. A must for anyone interested in woody plants.

The Plant Root and Its Environment - Virginia Tech Symposium report - Ed. by E. W. Carson. \$24 from E. W. Carson, 508 Floyd Street, Blacksburg, VA 24060 (703-231-9590; FAX 703-231-3928)

Guide to 1100 Dwarf Conifer Cultivars. \$17.95 from: Dutchess County Conifers, 12 Miller Hill Dr., LaGrangeville, NY 12540.

Landscape Plants for the Twenty-First Century - Erik A. Neumann. 72 p. describing 65 National Arboretum tree and shrub introductions. \$7.50 + \$1.50 handling from Friends of the National Arboretum, 3501 New York Avenue, NE, Washington, DC 20002 (202-544-8733). While writing - also enquire about memberships in FONA and support this magnificent national facility (which is badly in such need of support with government cutbacks in financing).

Street Tree Factsheets - characteristics and color photographs of 122 trees for street planting. \$17.50 (check to The Pennsylvania State University - includes mailing) from: Publication Distribution Center, 112 Ag. Administration Bldg., The Pennsylvania State University, University Park, PA 16802 (814-865-6713).

Xeriscape Gardening - Water Conservation for the American Landscape by Ellefson, Stephens and Welsh - endorsed by the National Xeriscape Council as the first definitive national guide to water-efficient landscaping. 300 p. with 85 color photos. \$30 + \$5 handling from: Xeriscape Gardening, 211 Suffolk Ave., College Station, TX 77840.

Seeds: Physiology of Development and Germination by Bewley & Black. The definitive book on technical aspects of seeds -for advanced propagators and very serious amateurs. Softcover \$39.50 from: Plenum Publishing Corporation, 233 Spring Street, NY, NY 10013-1578.

A Gardener Obsessed - Observations, Reflections, and Advice for other Dedicated Gardeners by Geoffrey B. Charlesworth. Serious gardeners know well the predecessor book by Geoffrey - The Opinionated Gardener (1988). One of the very best American horticultural writers - a philosophical book for both serious information and simply pure pleasure of the flow and rhythm of fine words and composition. \$24.95 + \$4.50 handling from: David R. Godine, Publisher, Horticultural Hall, 300 Massachusetts Ave., Boston, MA 02115 (1-800-344-4771; FAX 1-800-226-0934).

Landscape Plants: Their Identification, Culture, and Use by Ferrell M. Bridwell. 576 p. with all full-color photos of all plants. \$49.95 from Delmar Publishers, Inc., Dept S-103G, Box 15015, Albany, NY 12212-5015

Flora of North America - it is rather astonishing that there is no complete flora of this long-settled, wealthy and sophisticated (a debatable concept worth considerable discussion I realize) continent - and a 12 year project by hundreds of taxonomists and scientists across the continent working to fill this serious botanical gap of over 20,000 floral species. The first two volumes of a planned 14 volumes are now available - and I find them very interesting and useful. The first volume (320 p., 73 photographs and 94 line drawings) is an introduction to the series with comprehensive surveys of the history, geography, introductions and movements of plants in North America over the last 70 million years. Volume two (320 pages, 607 distribution maps and 65 illustrations) covers all the ferns (509 species in 70 genera) and conifers (118 species in 22 genera) of this continent. The writing and illustrations are clear, readable and useful (with the possible exception that the maps - which are excellent - should have been double their size for a publication of this price - it's a bit difficult to get a clear picture of the distribution of a plant occupying a single county on a map of the entire North American continent that is only 2" high!). Both books are \$75 @ + \$5 shipping from: Oxford University Press, Biological Sciences Marketing Dept., 200 Madison Ave., NY, NY 10016 (1-800-451-7556)

Floras are generally pretty non-controversial, but the recent publication of: Jepson's Flora of California (1993) - created a great deal of controversy in the botanical community there. The issues at stake (basically - do species exist?) were discussed in: Species Denial by Stephan W. Edwards and Richard W. Clinnick in The Four Seasons - the Journal of the Regional Parks Botanic Garden 9(3):4-20. (Tilden Regional Park, Berkeley, CA 94708-2396) (\$3 for single copy). "We have been informed by taxonomists (and others) writing Jepson treatments, that they do not personally believe species really exist. Some have stated to us their belief that this attitude affects taxonomic decisions (indeed, it is difficult to see how it could not). The Manual itself states that: ". . . taxa at all levels . . . are not real entities . . . it is helpful in understanding why there is so much change in taxonomy to recognize that taxa are never "real things" - they are simply the best concept we can define at the moment."

Later in the article: "What plant taxonomy may be suffering from . . . may not be wholly medieval ultranomenclature, but also to substantial degree the postmodernism/constructivism that infests so much of the intellectual establishment (you won't find that sentence in People magazine!): everything is relative, truth is not absolute or verifiable but a product of culture and subject to authority . . . etc. Some of our "theoreticians" can play word games around that, but those serious about understanding and protecting diversity will use common sense and get on with the job at hand. As Charles Pierce once said, "Let us not pretend to deny in our philosophy what we know in our heart to be true."

One of the sidelight issues of this debate - if there are no species - then you can't have endangered species programs and legal protection of any plants. Intriguing concepts and arguments for those into the obscure and convoluted.

Periodicals:

The New Plantsman - new version of The Plantsman - one of the best technical journals devoted to reviews of focused plant groups or species. 29 Pounds subscription from: The New Plantsman, RHS Subscription Service, P. O. Box 38, Ashford, Kent TN25 6PR, England. A cumulative index for the first 15 volumes 1979-1994 is also available for 11.95 Pounds.

Garden Literature - an author and subject index to periodical articles about plants and gardens - indexes over 100 English language titles - magazines, newsletters, articles, etc. \$50 per year (quarterly issues) from Sally Williams, Garden Literature Press, 398 Columbus Ave., Suite 181, Boston, MA 02116-6008 (616-424-1784; FAX 617-424-1712)

Recent Deaths of Noted Horticultural Authors/Writers:

Lewis C. Chadwick (1902-1993) - one of the most important woody plants authorities of the U.S. From Vermont with a BS at the University of Vermont in 1925, Phd. from Cornell in 1931, and faculty member of Ohio State University 1929-67 - serving as department head for the last 14 years there. Outstanding teacher, researcher, writer (The Modern Nursery 1931, Commercial Flower Forcing 1934, and over 75 scientific papers), and industry leader throughout his life. Received innumerable awards and certainly one of the top 5 woody plants authorities in the U.S. from the 30's through the 60's.

Hudson T. Hartmann (1914-1994) - known to generations of horticultural students as the coauthor of Hartmann and Kester's Plant Propagation -Principles and Practics - the standard teaching propagation reference through 5 editions from the 50's to the present. Born in Kansas, BS (39) and MS (40) from University of Missouri, Phd. degree in plant physiology UC Berkeley (47), with a career in fruit science at UC Davis (47-80). Noted for olive physiology and plant propagation reseach and writing - and given credit for pioneering the concept of mist propagation, use of hormones and other techniques in woody plant propagation.

PLANTS RECEIVED BY THE NCSU Arboretum (now the JC Raulston Arboretum) - JANUARY - DECEMBER 1992

- 92/0001 - Franklinia alatamaha - Elwood Harris - Raleigh, NC (732-7280) - 1 Gallon- 1/20.
- 92/0002 - Styrax obassia - Abernathy's Nurseries - Winston-Salem, NC - 7' - 01/29.
- 92/0003 - Camellia X 'Polar Ice' (NA61950) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0004 - Camellia X 'Snow Flurry' - (NA61951) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0005 - Camellia X 'Winter's Rose' - (NA61952) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0006 - Camellia X 'Winter's Charm' - (NA62301) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0007 - Camellia X 'Winter's Hope' - (NA62302) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0008 - Camellia X 'Winter's Interlude' (NA80-418) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0009 - Camellia X 'Winter's Dream' - (NA81-1058) - U. S. National Arboretum - Washington, DC - Liner - 02/03.
- 92/0010 - Smilax walteri - Arty Schronce - Atlanta, GA - Seed - 02/08.
- 92/0011 - Acanthus balcanicus (E126) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0012 - Callicarpa giraldiana (E447) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0013 - Lysimachia brachystachys (E392) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0014 - Lysimachia lichiangensis (E395) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0015 - Lysimachia lobelioides (E396) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0016 - Paeonia cambessedessi (E385) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0017 - Picea smithiana (E107) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0018 - Widdringtonia cupressoides (E103) - Nantes Botanical Garden - Nantes, France - Seed - 02/10.
- 92/0019 - Abies koreana #0004 - ARGS Seed Exchange - Seed - 02/14.
- 92/0020 - Asclepias purpurascens #0737 - ARGS Seed Exchange - Seed - 02/14.
- 92/0021 - Cistus salvifolius prostratus #1261 - ARGS Seed Exchange - Seed - 02/14.
- 92/0022 - Colchicum corsicum #1352 - ARGS Seed Exchange - Seed - 02/14.
- 92/0023 - Croton alabamensis #1500 - ARGS Seed Exchange - Seed - 02/14.
- 92/0024 - Liatrus densispicata #3121 - ARGS Seed Exchange - Seed - 02/14.
- 92/0025 - Liatrus microcephala #3123 - ARGS Seed Exchange - Seed - 02/14.
- 92/0026 - Liatrus squarrosa hirsuta #3132 - ARGS Seed Exchange - Seed - 02/14.
- 92/0027 - Ourisia coccinea #3367 - ARGS Seed Exchange - Seed - 02/14.

- 92/0028 - *Paeonia mlokosweitschii* #3665 - ARGS Seed Exchange - Seed - 02/14.
- 92/0029 - *Paeonia veitchii woodwardii* #3680 - ARGS Seed Exchange - Seed - 02/14.
- 92/0030 - *Pollia japonica* #4038 - ARGS Seed Exchange - Seed - 02/14.
- 92/0031 - *Thermopsis lupinoides* #4998 - ARGS Seed Exchange - Seed - 02/14.
- 92/0032 - *Thermopsis montana* #4999 - ARGS Seed Exchange - Seed - 02/14.
- 92/0033 - *Yucca angustissima* #5334 - ARGS Seed Exchange - Seed - 02/14.
- 92/0034 - *Yucca baccata* #5335 - ARGS Seed Exchange - Seed - 02/14.
- 92/0035 - *Yucca baileyi intermedia* #5337 - ARGS Seed Exchange - Seed - 02/14.
- 92/0036 - *Yucca glauca* #5339 - ARGS Seed Exchange - Seed - 02/14.
- 92/0037 - *Zephyranthes minima* #5348 - ARGS Seed Exchange - Seed - 02/14.
- 92/0038 - *Acer buegeranum* - Univ. of Va. Arboretum - Boyce, VA - Seed - 02/17.
- 92/0039 - *Acer miyabei* - Univ. of Va. Arboretum - Boyce, VA - Seed - 02/17.
- 92/0040 - *Acer monspessulanum* - Univ. of Va. Arboretum - Boyce, VA - Seed - 02/17.
- 92/0041 - *Acer truncatum* - Univ. of Va. Arboretum - Boyce, VA - Seed - 02/17.
- 92/0042 - *Acer trautvetteri* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0043 - *Aristolochia elegans* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0044 - *Camassia cusickii* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0045 - *Daphne mezereum* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0046 - *Daphne oleoides* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0047 - *Daphne sericea* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0048 - *Daphne tangutica* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0049 - *Eryngium giganteum* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0050 - *Galtonia viridiflora* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0051 - *Genista aetnensis* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0052 - *Scilla messeniaca* - Wisley Gardens - Woking, Surrey, England - Seed - 02/18.
- 92/0053 - *Lagerstroemia speciosa* - Medicinal Garden of Guangxi, - Nanning, China - Seed - 02/20.
- 92/0054 - *Sophora flavescens* - Medicinal Garden of Guangxi, - Nanning, China - Seed - 02/20.
- 92/0055 - *Cornus florida* 'Autumn Gold' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0056 - *Liquidambar styraciflua* 'Worpleston' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0057 - *Prunus incisa* 'February Pink' - Dr. John Frett - Univ. of Del. - Newark, DE - Gallon - 02/29.
- 92/0058 - *Viburnum burkwoodi* 'Chenault' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0059 - *Viburnum plicatum* 'Shoshoni' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0060 - *Viburnum* X 'Chesapeake' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0061 - *Viburnum* X 'Eskimo' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0062 - *Viburnum* X 'Mohawk' - Dr. John Frett - Univ. of Del. - Newark, DE - Liner - 02/29.
- 92/0063 - *Amelanchier* X 'Princess Diana' - Schmidt Nursery - Boring, OR - 8' - 03/05.
- 92/0064 - *Fraxinus pennsylvanica* 'Lan. Aerial' - Schmidt Nursery - Boring, OR - 11' - 03/05.
- 92/0065 - *Malus* X 'Adirondac' - Schmidt Nursery - Boring, OR - 6' - 03/05.
- 92/0066 - *Malus* X 'Golden Raindrops' - Schmidt Nursery - Boring, OR - 8' - 03/05.
- 92/0067 - *Malus* X 'Purple Prince' - Schmidt Nursery - Boring, OR - 5' - 03/05.
- 92/0068 - *Prunus* X 'Weeping Yoshino' - Schmidt Nursery - Boring, OR - 6' - 03/05.
- 92/0069 - *Quercus acutissima* - Schmidt Nursery - Boring, OR - 11' - 03/05.
- 92/0070 - *Taxodium distichum* - Schmidt Nursery - Boring, OR - 6' - 03/05.
- 92/0071 - *Cercis racemosa* (NA49084-S) - U. S. National Arboretum - Washington, DC - Seed - 03/09.
- 92/0072 - *Rosa* X 'Buff Beauty' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0073 - *Rosa* X 'English Garden' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0074 - *Rosa* X 'Gold Badge' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0075 - *Rosa* X 'Lilac Charm' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0076 - *Rosa* X 'Nymphenburg' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0077 - *Rosa* X 'Penelope' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0078 - *Rosa* X 'Roseaie De L'Hay' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0079 - *Rosa* X 'Sir Walter Raleigh' - Wayside Gardens Co. - Hodges, SC - Plant - 03/10.
- 92/0080 - *Rosa* X 'Lady Banks Yellow' - Antique Rose Emporium - Brenham, TX - Plant - 03/10.
- 92/0081 - *Rosa* X 'New Dawn' - Antique Rose Emporium - Brenham, TX - Plant - 03/10.
- 92/0082 - *Salix* X *rubens* 'Enenei' - Bill Frederick - Hockessin, DE - Hardwood Cuttings - 03/13.
- 92/0083 - *Cercis canadensis* 'Pink Bud' - The Holden Arboretum - Mentor, OH - Scions - 03/15.
- 92/0084 - *Cercis canadensis* 'Wither's Pink Charm' - The Holden Arboretum - Mentor, OH - Scions - 03/15.
- 92/0085 - *Acer franchettii* (#5) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0086 - *Actinodaphne cupularis* (#152) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0087 - *Actinodaphne omeiensis* (#153) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0088 - *Actinodaphne reticulata* (#154) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0089 - *Aralia echinocaulis* (#29) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.

- 92/0090 - *Buxus sinica* (#450) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0091 - *Camellia chekiang-oleosa* (#317) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0092 - *Camellia rosthorniana* (#319) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0093 - *Carpinus polyneura* (#35) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0094 - *Cinnamomum parthenoxylon* (#515) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0095 - *Clematoclethra lasioclada* (#8) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0096 - *Enkianthus chinensis* (#107) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0097 - *Euptelea pleiospermum* (#320) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0098 - *Evodia baberi* (#279) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0099 - *Ficus henryi* (#202) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0100 - *Fokienia hodginsii* (#1) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0101 - *Ilex ficoidea* (#22) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0102 - *Kadsura longipedunculata* (#190) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0103 - *Lagerstroemia chekiangensis* (#535) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0104 - *Lindera communis* (#155) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0105 - *Lindera fruticosa* (#156) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0106 - *Lindera pulcherrima* var. *hemsleyana* (#157) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0107 - *Litsea mollifolia* (#158) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0108 - *Mallotus tenuifolius* (#115) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0109 - *Meliosma cuneifolia* (#283) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0110 - *Meliosma yunnanensis* (#284) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0111 - *Meliiodendron wangianum* (#314) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0112 - *Millettia dielsiana* (#169) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0113 - *Millettia pachycarpa* (#170) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0114 - *Neocinnamomum fargesii* (#159) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0115 - *Nothaphoebe cavaleriei* (#160) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0116 - *Ophiopogon wallichianus* (#178) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0117 - *Picrasma quassioides* (#297) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0118 - *Pieris polita* (#480) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0119 - *Pittosporum crispulum* (#217) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0120 - *Pittosporum truncatum* (#218) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0121 - *Pittosporum truncatum* (#558) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0122 - *Stachyurus salicifolius* (#310) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0123 - *Stachyurus szechuanensis* (#311) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0124 - *Stachyurus yunnanensis* (#312) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0125 - *Styrax confusa* (#616) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0126 - *Styrax dasyantha* (#617) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0127 - *Styrax philadelphoides* (#618) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0128 - *Tilia henryana* var. *subglabra* (#621) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0129 - *Tilia miqueliama* (#622) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0130 - *Wikstromia indica* (#417) - Shanghai Botanical Garden - Shanghai, China - Seed - 03/22.
- 92/0131 - *Liriope muscari* 'Pee Dee Ingot' - Coastal Gardens - Myrtle Beach, SC - Plant - 03/23.
- 92/0132 - *Lagerstroemia* 'Acoma' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0133 - *Lagerstroemia* 'Apalachee' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0134 - *Lagerstroemia* 'Auburn' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0135 - *Lagerstroemia* 'Biloxi' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0136 - *Lagerstroemia* 'Byer's Red' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0137 - *Lagerstroemia* 'Byer's Wonderful White' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0138 - *Lagerstroemia* 'Carolina Beauty' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0139 - *Lagerstroemia* 'Catawba' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0140 - *Lagerstroemia* 'Choctaw' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0141 - *Lagerstroemia* 'Comanche' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0142 - *Lagerstroemia* 'Hopi' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0143 - *Lagerstroemia* 'Lipan' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0144 - *Lagerstroemia* 'Miami' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0145 - *Lagerstroemia* 'Muskogee' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0146 - *Lagerstroemia* 'Natchez' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0147 - *Lagerstroemia* 'Near East' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0148 - *Lagerstroemia* 'Osage' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0149 - *Lagerstroemia* 'Pecos' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0150 - *Lagerstroemia* 'Pink' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0151 - *Lagerstroemia* 'Potomac' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.

- 92/0152 - Lagerstroemia 'Powhatan' - Byeal how-to books for level research development and extension workers. It provides access to publications from a wide variety of major publishers through one address, which is especially useful for organizations and individuals working in rural areas or abroad." The Environmental Network Newsletter. I find this an excellent way to keep up with a huge number of books coming out from dozens of publishers - and in addition they can provide in one place a central point to order all these book AL - Plant - 03/26.
- 92/0158 - Lagerstroemia 'Victor' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0159 - Lagerstroemia 'Wichita' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0160 - Lagerstroemia 'William Toovy' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0161 - Lagerstroemia 'Yuma' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0162 - Lagerstroemia 'Zuni' - Byers Nursery Company - Huntsville, AL - Plant - 03/26.
- 92/0163 - Lonicera X 'Graham Thomas' - Wayside Nursery - Greenwood, SC - Plant - 03/27.
- 92/0164 - Sarcococca orientalis (U. WA. Arb) - Wayside Nursery - Greenwood, SC - 3" pot - 03/27.
- 92/0165 - Cornus ? 'Bud's Yellow' - Bailey Nurseries, Inc. - St. Paul, MN - 18" liner - 03/28.
- 92/0166 - Physocarpus opulus 'Select' - Bailey Nurseries, Inc. - St. Paul, MN - 18" liner - 03/28.
- 92/0167 - Tilia cordata 'Norlin' - Bailey Nurseries, Inc. - St. Paul, MN - 8' liner - 03/28.
- 92/0168 - Viburnum 'Emerald Triumph' - Bailey Nurseries, Inc. - St. Paul, MN - 24" liner - 03/28.
- 92/0169 - Abies borisii-regalis - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0170 - Abies cephalonica var. graeca - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0171 - Abies cephalonica X nordmannia - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0172 - Abies cilicica - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0173 - Abies concolor 'Compacta' - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0174 - Abies concolor var. candicans - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0175 - Abies holophylla - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0176 - Abies homolepis - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0177 - Abies koreana 'Prostrate Beauty' - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0178 - Abies lasiocarpa 'Compacta' - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0179 - Abies nephrolepis - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0180 - Abies nephrolepis f. chlorocarpa - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0181 - Abies pinsapo 'Glauca' - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0182 - Abies sachalinensis - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0183 - Abies sibirica - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0184 - Abies veitchii - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0185 - Abies veitchii var. olivacea - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0186 - Abies X umbellata - Arnold Arboretum - Jamaica Plain, MA - Scions - 04/05.
- 92/0187 - Poliotrysis sinensis (AA637-81) - Arnold Arboretum - Jamaica Plain, MA - Seed - 04/05.
- 92/0188 - Abies cephalonica (92001 - J. Marenco, Ft. Wash., PA) - ACS Distribution - Seed - 04/06.
- 92/0189 - Abies homolepis (92003 - Longwood Gardens, Kennett Square, PA) - ACS Distribution - Seed - 04/06.
- 92/0190 - Abies nordmanniana (92007 - Longwood Garden, Kennett Square, PA) - ACS Distribution - Seed - 04/06.
- 92/0191 - Carpinus cordata (92025 - J. Marenco, Ft. Wash., PA) - ACS Distribution - Seed - 04/06.
- 92/0192 - Carpinus japonica (92026 - J. Marenco, Ft. Wash., PA) - ACS Distribution - Seed - 04/06.
- 92/0193 - Cercis racemose (92032 - U. S. National Arboretum) - ACS Distribution - Seed - 04/06.
- 92/0194 - Evodia hupehensis (92064 - J. Marenco, Ft. Wash., PA) - ACS Distribution - Seed - 04/06.
- 92/0195 - Stewartia rostrata (92145 - J. Marenco, Ft. Wash., PA) - ACS Distribution - Seed - 04/06.
- 92/0196 - #7 - Chicago Botanic Garden - Glencoe, IL - Seed - 04/08.
- 92/0197 - #10 - Chicago Botanic Garden - Glencoe, IL - Seed - 04/08.
- 92/0198 - #32 - Chicago Botanic Garden - Glencoe, IL - Seed - 04/08.
- 92/0199 - #41 - Chicago Botanic Garden - Glencoe, IL - Seed - 04/08.
- 92/0200 - Agapanthus X 'Prolific Blue' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0201 - Cornus X 'Aurora' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0202 - Cornus X 'Constellation' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0203 - Cornus X 'Galaxy' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0204 - Cornus X 'Ruth Ellen' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0205 - Cornus X 'Stardust' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0206 - Hibiscus syriacus 'Pink Giant' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0207 - Lespedeza thunbergii 'Gibraltar' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0208 - Magnolia X 'Miss Honeybee' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0209 - Stewartia pseudocamellia 'Ballet' - Wayside Gardens - Hodges, SC - Plant - 04/10.
- 92/0210 - Pseudolarix amabilis - The Holden Arboretum - Mentor, OH - Seed - 04/13.
- 92/0211 - Tamarix parviflora - H. Losing - Pinneberg, Germany - Cuttings - 04/14.
- 92/0212 - Tamarix pentandra - H. Losing - Pinneberg, Germany - Cuttings - 04/14.
- 92/0213 - Tamarix ramosissima - H. Losing - Pinneberg, Germany - Cuttings - 04/14.
- 92/0214 - Asclepias speciosa (#47) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.

- 92/0215 - *Calocedrus decurrens* (#1) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0216 - *Cornus nuttallii* (#65) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0217 - *Cupressus macnabiana* (#5) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0218 - *Cupressus sargentii* (#7) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0219 - *Iris purdyi* (#92) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0220 - *Pseudotsuga menziesii* (#20) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0221 - *Styrax officinalis* var. *fulvescens* (#199) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0222 - *Thuja plicata* (#9) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0223 - *Triteleia hyacinthina* (#42) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0224 - *Tsuga mertensiana* (#21) - UC Botanical Garden - Berkeley, CA - Seed - 04/17.
- 92/0225 - *Iris verna* - The NC Arboretum - Asheville, NC - Division - 04/17.
- 92/0226 - *Betula platyphylla* var. 'Whitespire' (on *B. nigra*) - Dr. Ranney, Mt. Crops Stat. - Fletcher, NC - 5' - 04/17.
- 92/0227 - *Arbutus arizonica* - Don Humphrey - Alexandria, VA - 1' B&B - 04/20.
- 92/0228 - Phlox X (*divaricata* X *amoena*) 'Green Spring' - Don Humphrey - Alexandria, VA - Liner - 04/20.
- 92/0229 - *Ungnadia speciosa* - Don Humphrey - Alexandria, VA - Liner - 04/20.
- 92/0230 - *Acer oliveranum* - Gerard Krewer - Univ. of GA, Tifton, GA - 8 1' Liners - 04/21.
- 92/0231 - *Berberis logoensis* 'Mystery Fire' - Savill Gardens Nursery - England - 1 Gal. - 04/22.
- 92/0232 - *Cistus X lusitanicus decumbens* - ? Nursery - England - 1 Gal. - 04/22.
- 92/0233 - *Pieris forrestii* 'Tilford' - ? Nursery - England - 1 Gal. - 04/22.
- 92/0234 - *Pieris japonica* 'Debutante' - Hilliers Nursery - England - 1 Gal. - 04/22.
- 92/0235 - *Pieris japonica* 'Firecrest' - Saville Gardens Nursery - England - 1 Gal. - 04/22.
- 92/0236 - *Pieris japonica* 'Little Heath' (?) - ? Nursery - England - 1 Gal. - 04/22.
- 92/0237 - *Pieris japonica* 'Sarabande' - Wisley Gardens Nursery - England - 1 Gal. - 04/22.
- 92/0238 - *Pieris japonica* 'Scarlette O'Hara' - Wisley Gardens Nursery - England - 1 Gal. - 04/22.
- 92/0239 - *Pieris japonica* 'Shojo' - Saville Gardens Nursery - England - 1 Gal. - 04/22.
- 92/0240 - *Astilbe X 'Rhineland'* - Pergola Nursery Products - Mt. Airy, NC - Division - 04/23.
- 92/0241 - *Hemerocallis X 'Pink Charm'* - Pergola Nursery Products - Mt. Airy, NC - Division - 04/23.
- 92/0242 - *Hemerocallis X 'Red Magic'* - Pergola Nursery Products - Mt. Airy, NC - Division - 04/23.
- 92/0242 - *Hemerocallis X 'September Magic'* - Pergola Nursery Products - Mt. Airy, NC - Division - 04/23.
- 92/0243 - *Hosta* - Pergola Nursery Products - Mt. Airy, NC - Division - 04/23.
- 92/0244 - *Pseudolarix amabilis* - The Holden Arboretum - Mentor, OH - Seed - 04/23.
- 92/0245 - *Arisaema amurense* - Dr. James Waddick - Kansas City, MO - Seed - 04/24.
- 92/0246 - *Clintonia udensis* (Nepal) - Dr. James Waddick - Kansas City, MO - Seed - 04/24.
- 92/0247 - *Eryngium leavenworthii* (Anderson City, KS) - Dr. James Waddick - Kansas City, MO - Seed - 04/24.
- 92/0248 - *Heracleum moellendorffii* (NE China) - Dr. James Waddick - Kansas City, MO - Seed - 04/24.
- 92/0249 - *Magnolia sieboldii* (Chanzchun, China) - Dr. James Waddick - Kansas City, MO - Seed - 04/24.
- 92/0250 - *Larix gmelini* var. *cajanderi* (N. Siberia, Bay of Alden, 63N, 1991 c/o Hortus Botanicus, Jakutsk, USSR) - John Silba - Lindenhurst, NY - Seed - 4/25.
- 92/0251 - *Aesculus pavia* - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0252 - *Buxus microphylla* - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0253 - *Buxus microphylla* 'Morris Midget' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0254 - *Buxus microphylla* 'Wintergreen' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0255 - *Buxus sempervirens* 'Vardar Valley' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0256 - *Chionanthus retusus* - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0257 - *Cornus kousa* 'Milky Way' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0258 - *Cornus mas* 'Golden Glory' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0259 - *Cotinus coggygria* 'Royal Robe' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0260 - *Euonymus alatus* 'Compactus' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0261 - *Ginkgo biloba* - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0262 - *Halesia carolina* - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0263 - *Hibiscus syriacus* 'Aphrodite' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0264 - *Hibiscus syriacus* 'Diana' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0265 - *Hibiscus syriacus* 'Minerva' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0266 - *Hydrangea paniculata* 'Grandiflora' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0267 - *Hydrangea paniculata* 'Webbs Grandiflora' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0268 - *Hydrangea paniculata* 'Tardiva' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0269 - *Hydrangea quercifolia* - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0270 - *Hydrangea quercifolia* 'Annabelle' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0271 - *Ilex crenata* 'Glory' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0272 - *Ilex crenata* 'Jersey Pinnacle' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0273 - *Ilex decidua* 'Council Fire' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0274 - *Ilex decidua* 'Warren's Red' - Shadow Nursery - Winchester, TN - Liners - 05/01.

- 92/0275 - Ilex decidua 'Male Pollinator' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0276 - Ilex verticillata 'Winter Red' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0277 - Ilex vomitoria (female) - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0278 - Ilex X 'Dr. Kassab' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0279 - Ilex X 'Nellie R. Stevens' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0280 - Jasminum nudiflorum - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0281 - Lagerstroemia X 'Biloxi' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0282 - Lagerstroemia X 'Hopi' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0283 - Lagerstroemia X 'Muskogee' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0284 - Lagerstroemia X 'Osage' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0285 - Lagerstroemia X 'Sioux' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0286 - Lagerstroemia X 'Tonto' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0287 - Lagerstroemia X 'Tuskegee' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0288 - Lagerstroemia X 'Yuma' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0289 - Kerria japonica 'Pleniflora' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0290 - Magnolia stellata 'King Rose' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0291 - Magnolia stellata 'Royal Star' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0292 - Magnolia X 'Ann' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0293 - Magnolia X 'Betty' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0294 - Magnolia X 'Jane' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0295 - Magnolia X loebneri 'Leonard Messell' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0296 - Magnolia X loebneri 'Ballerina' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0297 - Magnolia X soulangeana - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0298 - Magnolia X soulangeana 'Alexandrina' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0299 - Magnolia X soulangeana 'Lilliputian' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0302 - Prunus glandulosa 'Plena' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0303 - Prunus laurocerasus 'Otto Luyken' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0304 - Prunus laurocerasus 'Schipkaensis' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0305 - Prunus subhirtella 'Autumnalis' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0306 - Prunus X 'Hally Jolivette' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0307 - Spiraea bumalda 'Dart's Red' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0308 - Spiraea bumalda 'Crimson Glory' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0309 - Spirea nipponica 'Snowmound' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0310 - Spiraea japonica 'Little Princess' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0311 - Spiraea prunifolia 'Plena' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0312 - Spiraea X 'Goldmound' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0313 - Syringa vulgaris 'Michael Buchner' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0314 - Taxus X media 'Densiformis' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0315 - Taxus X media 'Hicksii' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0316 - Thuja occidentalis 'Emerald' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0317 - Thuja occidentalis 'Hetz Midget' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0318 - Thuja occidentalis 'Holmstrup' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0319 - Thuja occidentalis 'Nigra' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0320 - Thuja occidentalis 'Pyramidalis' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0321 - Thuja occidentalis 'Sudsworth Pumila' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0322 - Thuja occidentalis 'Techny' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0323 - Thuja occidentalis 'Woodwardii' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0324 - Viburnum burkwoodii - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0325 - Viburnum carlcephalum - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0326 - Viburnum dilatatum - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0327 - Viburnum dilatatum 'Erie' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0328 - Viburnum dilatatum 'Iroquois' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0329 - Viburnum dilatatum 'Oneida' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0330 - Viburnum juddii - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0331 - Viburnum plicatum - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0332 - Viburnum plicatum 'Nana' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0333 - Viburnum plicatum 'Mariesii' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0334 - Viburnum plicatum 'Pink Beauty' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0335 - Viburnum plicatum 'Shasta' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0336 - Viburnum pragense - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0337 - Viburnum X 'Alleghany' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0338 - Viburnum X 'Cayuga' - Shadow Nursery - Winchester, TN - Liners - 05/01.

- 92/0339 - Viburnum X 'Eskimo' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0340 - Viburnum X 'Mohawk' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0341 - Viburnum X 'Willowwood' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0342 - Wisteria floribunda 'Alba' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0343 - Wisteria floribunda 'Rosea' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0344 - Wisteria floribunda 'White Blue Eye' - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0345 - Vitex agnus-castus - Shadow Nursery - Winchester, TN - Liners - 05/01.
- 92/0346 - Abelia coreana (048) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0347 - Abelia mosanensis (049) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0348 - Abelia mosanensis (050) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0349 - Acanthopanax seoulensis (024) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0350 - Acer okamotoanum (003) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0351 - Acer takesimense (005) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0352 - Acer triflorum (006) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0353 - Amorphophallus kiusianus (018) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0354 - Aralia continentalis (027) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0355 - Arisaema peninsulae f. variegatum (021) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0356 - Aristolochia manshuriensis (031) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0357 - Carpinus cordata (037) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0358 - Edgeworthia papyrifera (247) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0359 - Elaeocarpus sylvestris var. ellipticus (090) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0360 - Evodia hupehensis (213) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0361 - Hepatica asiatica (184) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0362 - Ilex rotunda (017) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0363 - Indigofera amblyantha (121) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0364 - Lindera angustifolia (107) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0365 - Machilus japonica (111) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0366 - Michelia compressa (157) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0367 - Neolitsia aciculata (116) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0368 - Neolitsia sericea (118) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0369 - Prunus takesimensis (199) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0370 - Raphiolepis umbellata var. liukuensis (280) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0371 - Thalictrum uchiyamai (189) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0372 - Tsuga sieboldii (169) - Chollipo Arboretum - Chollipo, Korea - Seed - 05/05.
- 92/0373 - Abies koreana - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0374 - Alcea rugosa - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0375 - Alcea rugosa var. alba - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0376 - Crame maritima - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0377 - Daphne mezereum - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0378 - Euphorbia stricta - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0379 - Helleborus argutifolius - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0380 - Helleborus foetidus - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0381 - Helleborus foetidus 'Webster Flisk' - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0382 - Helleborus X sternii - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0383 - Lathyrus vernus - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0384 - Linaria purpurea - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0385 - Nectaroscordum siculum - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0386 - Nicotiana alata 'Limelight' - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0387 - Nicotiana langsdorfii - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0388 - Paeonia delavayi - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0389 - Paeonia mlokosewitschii - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0390 - Papaver rhoeos 'Angel Wings' - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0391 - Phlomis cashmeriana - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0392 - Philadelphus argyrocalyx - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0393 - Stewartia serrata - Harlow Carr Botanical Gardens - Harrogate, England - Seed - 05/07.
- 92/0394 - Arbutus menziesii (#78) - Washington Park Arboretum - Univ. of Wash. - Seattle, WA - Seed - 05/20.
- 92/0395 - Calocedrus decurrens (#82) - Washington Park Arboretum - Univ. of Wash. - Seattle, WA - Seed - 05/20.
- 92/0396 - Carpinus cordata (#88) - Washington Park Arboretum - Univ. of Wash. - Seattle, WA - Seed - 05/20.
- 92/0397 - Cytisus ratisbonensis (#111) - Washington Park Arboretum - Univ. of Wash. - Seattle, WA - Seed - 05/20.
- 92/0398 - Sinofranchetia chinensis (#194) - Washington Park Arb - Univ. of Wash. - Seattle, WA - Seed - 05/20.
- 92/0399 - Stewartia serrata (#214) - Washington Park Arboretum - Univ. of Wash. - Seattle, WA - Seed - 05/20.
- 92/0400 - Styra shiriana (#217) - Washington Park Arboretum - Univ. of Wash. - Seattle, WA - Seed - 05/20.

- 92/0401 - Acer sp. ? - Yucca Do Nursery - Waller, TX - Qt. - 06/05
- 92/0402 - Cercis mexicana (El Cielo) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0403 - Osmanthus sp. (El Cielo) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0404 - Pavonia sp. 'Dark Pink' - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0405 - Philadelphus maculatus (T24M-21S-082290) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0406 - Philadelphus mexicana (El Cielo) (T26M-72S-101490) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0407 - Philadelphus sp. (T23M-34S-070890) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0408 - Philadelphus sp. (Chipinque) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0409 - Philadelphus sp. (Rayones) (T25M-28S-090290) Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0410 - Philadelphus sp. (Taxus Canyon) (T27M-17S-111790) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0411 - Ribes sp. (Cd. Del Toro) (T23M-25S-070890) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0412 - Salvia regla (Mt. Emory) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0413 - White fruit tree? (3) - Yucca Do Nursery - Waller, TX - Qt. - 06/05.
- 92/0414 - Callicarpa sp. - Camellia Forest Nursery - Chapel Hill, NC - 2 Gal - 06/06.
- 92/0415 - Styrax japonica (Camellia Forest Dwarf) - Camellia Forest Nursery - Chapel Hill, NC - 2 Gal - 06/06.
- 92/0416 - Trachycarpus martianus - Huntington Botanical Garden - San Marino, California - Seed - 06/07.
- 92/0417 - Abies cephalonica - Arboretum Mlynany - Slepčany, Czechoslovakia - Seed - 06/09.
- 92/0418 - Berberis gagnepainii - Arboretum Mlynany - Slepčany, Czechoslovakia - Seed - 06/09.
- 92/0419 - Sorbaria arborea - Arboretum Mlynany - Slepčany, Czechoslovakia - Seed - 06/09.
- 92/0420 - Anapalina caffra - Longwood Gardens - Kennett Square, PA - Seed - 06/10.
- 92/0421 - Antholyza plicata - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0422 - Centaurea cheiranthifolia - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0423 - Cercis chinensis 'Alba' - Longwood Gardens - Kennett Square, PA - Seed - 06/10.
- 92/0424 - Helichrysum fontanesii - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0425 - Pennisetum setaceum 'Cupreum Compacta' - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0426 - Rudbeckia maxima - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0427 - Veltheimia bracteata - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0428 - Watsonia aletroides - Longwood Gardens - Kennett Square, PA - Liner - 06/10.
- 92/0429 - Crinum asiaticum 'Cuprifolium' - AABGA Plant Sale - Newark, OH - Gal. - 06/15.
- 92/0430 - Crinum asiaticum 'Variegatum' - AABGA Plant Sale - Newark, OH - Gal. - 06/15.
- 92/0431 - Fagus sylvatica 'Fastigata' - AABGA Plant Sale - Newark, OH - Gal. - 06/15.
- 92/0432 - Pinus flexilis 'Vanderwolf Pyramid' - AABGA Plant Sale - Newark, OH - Gal. - 06/15.
- 92/0433 - Aesculus X arnoldiana (D910047.004) - Dawes Arboretum - Newark, OH - Gal. - 06/15.
- 92/0434 - Aesculus X 'Homestead' (D910143.008) - Dawes Arboretum - Newark, OH - Gal. - 06/15.
- 92/0435 - Berberis concinna (D910307.001) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0436 - Daphne X burkwoodii 'Somerset' (D900624.006) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0437 - Fraxinus chinensis (D900271.004) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0438 - Juniperus communis 'Hornibrookii' (D900731.004) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0439 - Maackia amurensis (D890025.001) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0440 - Pinus armandii (D900761.010) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0441 - Prunus vaniotii (D910423.004) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0442 - Quercus micranthera (D910531.011) - Dawes Arboretum - Newark, OH - Qt. - 06/15.
- 92/0443 - Acer tschonoskii var. rubripes (89-560) - Holden Arboretum - Mentor, OH - Qt. - 06/15.
- 92/0444 - Clematis chiisanensis (90-253) - Holden Arboretum - Mentor, OH - Qt. - 06/15.
- 92/0445 - Lindera obtusiloba (89-586) - Holden Arboretum - Mentor, OH - Qt. - 06/15.
- 92/0446 - Picea wilsonii (89-112) - Holden Arboretum - Mentor, OH - Qt. - 06/15.
- 92/0447 - Picea abies 'Asselym' (051GS91) - Secrest Arboretum - Wooster, OH - Qt. - 06/15.
- 92/0448 - Picea abies 'Inversa' (959GS91) - Secrest Arboretum - Wooster, OH - Qt. - 06/15.
- 92/0449 - Mahonia lanceolatus (T41M-6S-051092 - Gomez Farias, Tamp., 2200') - YDN - Waller, Tx - Seed - 07/03.
- 92/0450 - Mahonia lanceolatus (T40M-3S-042592 - Gomez Farias, Tamp., 2300') - YDN - Waller, Tx - Seed - 07/03.
- 92/0451 - Mahonia lanceolatus (T40M-2S-042592 - Gomez Farias, Tamp., 1400') - YDN - Waller, Tx - Seed - 07/03.
- 92/0452 - Mahonia chochoco (T39M-2S-031892 - Montemorelos, N. L., Mx. 1850') - YDN - Waller, Tx - Seed - 07/03.
- 92/0453 - Mahonia chochoco (T39M-1S-031892) - Montemorelos, N. L., Mx. 1600') - YDN - Waller, Tx - Seed - 07/03.
- 92/0454 - Mahonia chochoco (T39M-2.5S-031892) - Montemorelos, N. L., 1850') - YDN - Waller, Tx - Seed - 07/03.
- 92/0455 - Cercis racemosa - U. S. National Arboretum - Washington, DC - Seed - 07/05.
- 92/0456 - Pinus torreyana - Escondido, CA - Seed - 07/06.
- 92/0457 - Abies nephrolepsis (90X401) - Chanticleer Gardens - Wayne, PA - 2" seedling - 07/22.
- 92/0458 - Actinidia kolomikta - Chanticleer Gardens - Wayne, PA - Qt. - 07/22.
- 92/0459 - Betula schmidtii (91X598) - Chanticleer Gardens - Wayne, PA - 1 gal. - 07/22.
- 92/0460 - Chamaecyparis obtusa var. formosana (90X217) - Chanticleer Gardens - Wayne, PA - 1 gal. - 07/22.
- 92/0461 - Corylopsis coreana (89X056) - Chanticleer Gardens - Wayne, PA - 3 gal. - 07/22.
- 92/0462 - Hydrangea petiolaris (92X132) - Chanticleer Gardens - Wayne, PA - 3" pot - 07/22.

- 92/0463 - *Pinus parviflora* (91X607) - Chanticleer Gardens - Wayne, PA - Seedling - 07/22.
- 92/0464 - *Pteroceltis tatarinowii* (91X101) - Chanticleer Gardens - Wayne, PA - 2 gal. - 07/22.
- 92/0465 - *Sanguisorba muricata* (92X132) - Chanticleer Gardens - Wayne, PA - 3" pot - 07/22.
- 92/0466 - *Schizophragma hydrangeoides* (92X137) - Chanticleer Gardens - Wayne, PA - 1 gal. - 07/22.
- 92/0467 - *Sorbaria sorbifolia stellipila* (91X611) - Chanticleer Gardens - Wayne, PA - 1 gal. - 07/22.
- 92/0468 - *Stewartia serrata* (91X308) - Chanticleer Gardens - Wayne, PA - 1 gal. - 07/22.
- 92/0469 - *Syringa oblata* var. *dilatata* (92X497) - Chanticleer Gardens - Wayne, PA - Rooted Cutting - 07/22.
- 92/0470 - *Tricyrtis dilatata* (91X623) - Chanticleer Gardens - Wayne, PA - 3" pot - 07/22.
- 92/0471 - *Tripterigium regelii* (92X123) - Chanticleer Gardens - Wayne, PA - Rooted Cutting - 07/22.
- 92/0472 - *Tsuga sieboldii* (91X554) - Chanticleer Gardens - Wayne, PA - 4 Seedlings - 07/22.
- 92/0473 - *Xanthoceras sorbifolia* (92X118) - Chanticleer Gardens - Wayne, PA - Qt. - 07/22.
- 92/0474 - *Vitex rotundifolia* (91X337) - Chanticleer Gardens - Wayne, PA - 1 gal. - 07/22.
- 92/0475 - *Cupressus atlantica* (CUP220 - Morocco) - Univ of Reading Bot Garden - Reading, England - Seed - 07/23.
- 92/0476 - *Cytisus battandieri* (FAB150 - WC - Morocco) - Univ of Reading Bot Garden - Reading, Eng - Seed - 07/23.
- 92/0477 - *Fritillaria acmopetala* (LIL176) - University of Reading Botanical Garden - Reading, England - Seed - 07/23.
- 92/0478 - *Fritillaria michailovskyi* (LIL180) - University of Reading Bot Garden - Reading, England - Seed - 07/23.
- 92/0479 - *Genista aetnensis* (FAB360) - University of Reading Botanical Garden - Reading, England - Seed - 07/23.
- 92/0480 - *Juniperus thurifera* (CUP500 - Morocco) - Univ of Reading Bot Garden - Reading, England - Seed - 07/23.
- 92/0481 - *Tetraclinis articulata* (CUP700 - WC - Morocco) - Univ of Reading Bot Garden - Reading, Eng - Seed - 07/23.
- 92/0482 - *Berberis thunbergii* 'Red Pillar' - Tom Krenitsky - Chapel Hill, NC - Qt. - 08/04.
- 92/0483 - *Daphne caucasica* - Tom Krenitsky - Chapel Hill, NC - Qt. - 08/04.
- 92/0484 - *Wattakaka sinensis* - Tom Krenitsky - Chapel Hill, NC - 2 gal. - 08/04.
- 92/0485 - *Weigela* X '*Victoria*' - Tom Krenitsky - Chapel Hill, NC - Qt. - 08/04.
- 92/0486 - *Chimonanthus praecox* 'Luteus' - Brooklyn Botanical Garden - Brooklyn, NC - Qt. - 08/09.
- 92/0487 - *Gleditsia triacanthos* var. *inermis* 'Emerald Cascade' - Brooklyn Bot Garden - Brooklyn, NC - Qt. - 08/09.
- 92/0488 - *Hydrangea serrata* 'Rosalba' - Brooklyn Botanical Garden - Brooklyn, NC - Qt. - 08/09.
- 92/0489 - *Viburnum* X '*Anne Russell*' - Brooklyn Botanical Garden - Brooklyn, NC - Qt. - 08/09.
- 92/0490 - *Hedera rhombea* 'Pierot' - Longwood Gardens - Kennett Square, PA - Qt. - 08/12.
- 92/0491 - *Hedera rhombea* 'Variegata' - Longwood Gardens - Kennett Square, PA - Qt. - 08/12.
- 92/0492 - *Acer buergerianum* 'Goshiki-Kaede' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0493 - *Chamaecyparis pisifera* 'Greg's Reversion' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0494 - *Cornus alternifolia* 'Robert Anderson' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0495 - *Distylium racemosum* 'Akebono' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0496 - *Duranta repens* 'Variegata' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0497 - *Forsythia* X '*intermedia*' 'Susan Gruninger' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0498 - *Hedera helix* 'Brazil' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0499 - *Hedera helix* 'Lemon Swirl' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0500 - *Hedera helix* 'Mint Kolibra' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0501 - *Hedera helix* 'Silver Emblem' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0502 - *Hedera helix* 'Silver Lace' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0503 - *Hedera helix* 'Tiger Eye' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0504 - *Hedera helix* 'Trident' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0505 - *Hibiscus syriacus* 'Boule de Feu' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0506 - *Hibiscus syriacus* 'Gladys Smith' (Variegated) - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0507 - *Hibiscus* X '*Lohengrin*' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0508 - *Hibiscus* X '*Tosca*' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0509 - *Impatiens omieana* - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0510 - *Juniperus* ? 'Fincham's Variegated' ??Psfier?? - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0511 - *Malva viscosa* *germanderii* 'Fiesta' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0512 - *Mallotus japonica* 'Variegata' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0513 - *Nymphaea hybridus* 'Arc-en-Ciel' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0514 - *Sambucus nigra* 'Pulverulenta' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0515 - *Syringa* sp. 'Father Fiala' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0516 - *Tovara virginiana* 'Variegata' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0517 - *Ulmus parvifolia* 'Variegata' - Glasshouse Works Nursery - Stewart, OH - cuttings - 08/16.
- 92/0518 - *Vinca minor* 'Silver Emblem' - Glasshouse Works Nursery - Stewart, OH - pot - 08/16.
- 92/0519 - *Vitis* X '*Sultanina Marble*' (sport of 'Thompson Seedless') - Sun World International - ?, CA - Liners - 08/18.
- 92/0520 - *Abelia serrata* (#42; 182-9) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0521 - *Acanthopanax sciadophylloides* (#19; 35-14) - Hiroshima Bot Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0522 - *Acer shirasawanum* (#11; 267-1) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0523 - *Cephalotaxus harringtonia* var. *nana* (#1; 33-13) - Hiroshima Bot Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0524 - *Cinnamomum camphora* (#102; -12) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.

- 92/0525 - *Cinnamomum japonicum* (#103; 74-4) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0526 - *Corchoropsis tomentosa* (#196; 243-6) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0527 - *Cornus brachypoda* (#69; 204-8) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0528 - *Evodiopanax innovans* (#22; 09010-15) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0529 - *Glochidion obovatum* (#83; 345-8) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0530 - *Illicium religiosum* (#94; 323-3) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0531 - *Larix leptolepis* (#4; 238-4) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0532 - *Mitchellia undulata* (#160; 310-7) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0533 - *Neolitsea aciculata* (#107; 321-7) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0534 - *Rosa bracteata* (#149; 337-4) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0535 - *Rosa davurica* (#150; 329-4) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0536 - *Rosa paniculigera* (#153; 330-8) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0537 - *Rosa sambucina* (#155; 98-6) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0538 - *Skimmia japonica* (#164; 173-3) - Hiroshima Botanical Garden - Hiroshima, Japan - Seed - 08/16.
- 92/0539 - *Acer ningpoense* (#51) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0540 - *Albizzia mollis* (#347) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0541 - *Alniphyllum fortunei* (#592) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0542 - *Arisaema erubescens* (#657) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0543 - *Camellia grijsii* (#596) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0544 - *Camellia pitardii* var. *yunnanica* (#598) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0545 - *Cercis yunnanensis* (#116) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0546 - *Erythrina arborescens* (#399) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0547 - *Ficus tikoua* (#351) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0548 - *Fokienia hodginsii* (#28) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0549 - *Illicium simonsii* (#292) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0550 - *Juniperus formosana* (#29) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0551 - *Keteleeria evelyniana* (#38) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0552 - *Liriope graminifolia* (#701) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0553 - *Machilus yunnanensis* var. *duclouxii* (#314) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0554 - *Mahonia mairei* (#91) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0555 - *Michelia yunnanensis* (#326) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0556 - *Ophiopogon bodinieri* (#702) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0557 - *Osteomeles schwerinae* (#495) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0558 - *Photinia franchetiana* (#496) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0559 - *Prunus conradinae* (#503) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0560 - *Prunus majestica* (#504) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0561 - *Pterocarya tonkinensis* (#297) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0562 - *Pterolobium punctatum* (#118) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0563 - *Sapindus delavayi* (#561) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0564 - *Tsuga dumosa* (#42) - Kunming Botanical Garden - Kunming, China - Seed - 08/24.
- 92/0565 - *Styrax officinale* subsp. *fulvescens* (Hwy 330 at 4,000' - San Bernadino Mts.) - Peter Fritsch - Rancho Santa Ana Botanic Garden - Claremont, CA - Seed - 09/03.
- 92/0566 - *Araucaria araucana* - Atlanta Botanical Garden - Atlanta, GA - Qts. (3) - 09/09.
- 92/0567 - *Asarum maximum* - Atlanta Botanical Garden - Atlanta, GA - Qt. - 09/09.
- 92/0568 - *Cupressus macrocarpa* 'Gold Crest' - Atlanta Botanical Garden - Atlanta, GA - Qts. (3) - 09/09.
- 92/0569 - *Guihaia argyrata* - Atlanta Botanical Garden - Atlanta, GA - Gallons (3) - 09/09.
- 92/0570 - *Podocarpus nagi* - Atlanta Botanical Garden - Atlanta, GA - Qt. - 09/09.
- 92/0571 - *Stewartia pseudocamellia* 'Rosea' - Atlanta Botanical Garden - Atlanta, GA - Qt. - 09/09.
- 92/0572 - *Stokesia laevis* (Taylor Co., GA) - Atlanta Botanical Garden - Atlanta, GA - Gallons. (5) - 09/09.
- 92/0573 - *Hedera helix* 'Adult Variegated' - Linda Blue - ? - Cuttings - 09/26.
- 92/0574 - *Amelanchier* X 'Silver Fountain' - Michael Hayman - Louisville, KY - Gallon - 09/24.
- 92/0575 - *Calycanthus floridus* 'Michael Lindsay' - Holbrook Farms Nursery - Fletcher, NC - Qt. - 10/03.
- 92/0576 - *Heuchera micrantha* 'Holbrook Purple' - Holbrook Farms Nursery - Fletcher, NC - Qt. - 10/03.
- 92/0577 - *Mahonia aquifolium* 'Orangee Flame' - Deward Clark - Catawba, NC - Gallon - 10/04.
- 92/0578 - *Acer grandidentatum* (T44M-26S-082492) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0579 - *Bauhinia lunaroides* (T43M-2S-080792) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0580 - *Carpinus* sp. (T43M-3S-080892) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0581 - *Cornus floccosa* (T44M-20S-082392) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0582 - *Eryngium umbellifera* (T34-21S-100791) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0583 - *Eryngium umbellifera* (T44M-33S-082492) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0584 - *Hamamelis mexicana* (T43M-13S-080892) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0585 - *Hamamelia mexicana* (T44M-16S-082392) - Yucca Do Nursery - Waller, TX - Seed - 10/09.

- 92/0586 - *Philadelphus* sp. (T43M-3S-080892) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0587 - *Yucca rostrata* (T43M-1S-080792) - Yucca Do Nursery - Waller, TX - Seed - 10/09.
- 92/0588 - *Aesculus pavia splendens* - Barry Yinger - Leonard Buck Garden - Far Hills, NJ - Seed - 10/10.
- 92/0589 - *Alstroemera psittacina* 'Variegata' - Barry Yinger - Leonard Buck Garden - Far Hill, NJ - Liner - 10/10.
- 92/0590 - *Dysosma pleiantha* - Barry Yinger - Leonard Buck Garden - Far Hill, NJ - Seed - 10/10.
- 92/0591 - Variegated kudzu - Barry Yinger - Leonard Buck Garden - Far Hill, NJ - Cutting - 10/10.
- 92/0592 - *Adiantum capillus veneris* (Southern Maidenhair) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0593 - *Cyrtomium falcatum* 'Rochesford' (Japanese Holly) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0594 - *Dryopteris atrata* (Shaggy Shield) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0595 - *Dryopteris celsa* (Log Fern) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0596 - *Dryopteris erythrosora* (Autumn) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0597 - *Osmunda cinnamomea* (Cinnamon) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0598 - *Osmunda regalis* (Royal) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0599 - *Rhumannra adianthiformis* (Leatherleaf) - Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0600 - *Thelypteris decursive pinnate* (Chinese Wood)- Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0601 - *Thelypteris kunthii* (Southern Wood) -Casa Flora - Dallas, TX - Liners - 10/15.
- 92/0602 - *Ligustrum lucidum* 'Big Black Blue' - Ben Brown, Brown's Nursery - Rockwell, NC - Cuttings - 10/20.
- 92/0603 - *Ligustrum lucidum* 'Hardy Small Leaf' - Ben Brown, Brown's Nursery - Rockwell, NC - Cuttings - 10/20.
- 92/0604 - *Rhodophiala bifida* - Huntington Botanical Garden - San Marino, CA - Seed - 10/26.
- 92/0605 - *Rhodophiala bifida* - Phil Adams - Hollywood, CA - Seed - 10/26.
- 92/0606 - *Acer skutchii* (#66-T45M-59S-101192 - Canindo, Tamaulipas, 4140') - YDN - Waller, TX - Seed - 10/26.
- 92/0607 - *Acer skutchii* (#67-T45M-60S-101192 - Canindo, Tamaulipas, MX 4160') - YDN - Waller, TX - Seed - 10/26.
- 92/0608 - *Acer skutchii* (#68-T45M-64S-101192 - San Jose, Tamaulipas, MX 4090') - YDN - Waller, TX - Seed - 10/26.
- 92/0609 - *Fagus mexicana* (#64-T45M-48S-101092 - Canindo, Tamp., MX 4650') - YDN - Waller, TX - Seed - 10/26.
- 92/0610 - *Fagus mexicana* (#65-T45M-49S-101092 - Canindo, Tamp., MX 4650') - YDN - Waller, TX - Seed - 10/26.
- 92/0611 - *Quercus* aff. *rugosa* (#77-T45M-119.5S-101492, La Encantada, N.L. 8260')- YDN- Waller, TX - Seed-10/26.
- 92/0612 - *Quercus* aff. *sillae* (#61-T45M-38S-100992, San Carlos, Tamp., MX 3000') - YDN - Waller, TX - Seed -10/26.
- 92/0613 - *Quercus* aff. *tomentella*(#76-T45M-126S-100992, La Encantada, N.L. 7160')- YDN- Waller,TX- Seed 10/26.
- 92/0614 - *Quercus germana* (#69-T45M-66M-101192, San Jose, Tamaulipas 4100') - YDN - Waller, TX - Seed - 10/26.
- 92/0615 - *Quercus sartorii* (#63-T45M-42S-101092, Alta Cima, Tamp., MX 3300') - YDN - Waller, TX - Seed - 10/26.
- 92/0616 - *Quercus* sp. (#74-T45M-119S-101492, La Encantada, Nuevo Leon, 8260')- YDN - Waller,TX - Seed - 10/26.
- 92/0617 - *Quercus* sp. (#75-T45M-124S-101492, La Encantada, Nuevo Leon 76400' - YDN- Waller, TX - Seed - 10/26.
- 92/0618 - *Lilium formosanum* - U. S. National Arboretum - Washington, DC - Seed - 10/29.
- 92/0619 - *Ceanothus cyrilliana* - Yucca Do Nursery - Waller, TX - Cuttings - 11/08.
- 92/0620 - *Ilex myrtifolia* 'Yellow-Fruited Form' - Yucca Do Nursery - Waller, TX - Cuttings - 11/08.
- 92/0621 - *Ilysanthus floribunda* - Yucca Do Nursery - Waller, TX - Cuttings - 11/08.
- 92/0622 - *Juniperus rigida* (Woodlanders) - Yucca Do Nursery - Waller, TX - Cuttings - 11/08.
- 92/0623 - Phlox ? - Yucca Do Nursery - Waller, TX - Cuttings - 11/08.
- 92/0624 - *Pistachia texensis* 'Dwarf' - Yucca Do Nursery - Waller, TX - Cuttings - 11/08.
- 92/0625 - *Betula costata* (89 Korea) - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0626 - *Betula davurica* (89 Korea) -Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0627 - *Betula schmidtii* (89 Korea) - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0628 - *Carpinus cordata* (89 Korea) - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0629 - *Cornus macrophylla* (89 Korea) - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0630 - *Fraxinus oxycarpa* - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0631 - *Gentiana uchiyamai* (89 Korea) - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0632 - *Laburnum anagyroides* -Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0633 - *Pinus pinaster* ssp. *hamiltoniana* -Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0634 - *Quercus mongolica* - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0635 - *Salix floderusii* (89 Korea) - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0636 - *Sorbus pohuashanensis* -Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0637 - *Syringa oblata* var. *dilatata* - Morris Arboretum - Philadelphia, PA - Seed - 11/12.
- 92/0638 - *Angelica japonica* - Arnold Arboretum - Jamaica Plain, MA - 3" Pot - 11/14.
- 92/0639 - *Asarum splendens* - Arnold Arboretum - Jamaica Plain, MA - 3" Pot - 11/14.
- 92/0640 - *Rosa* X 'Chuckles' - Arnold Arboretum - Jamaica Plain, MA - 3" Pot - 11/14.
- 92/0641 - *Acer oliverianum* - Barrett Tree Company - Augusta, GA - Gallon - 11/19.
- 92/0642 - *Jasminum mesnyi* - Barrett Tree Company - Augusta, GA - Gallon - 11/19.
- 92/0643 - *Magnolia virginiana* - Barrett Tree Company - Augusta, GA - Gallon - 11/19.
- 92/0644 - *Rhamnus carolina* - Barrett Tree Company - Augusta, GA - Gallon - 11/19.
- 92/0645 - *Clematis cirrhosa* 'Chuckles' - Dr. Gerald Straley - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0646 - *Aucuba japonica* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0647 - *Chamaecyparis nootkatensis* 'Compacta Argenteo-Variegata' - UBC Bot - Vancouver, BC, - Cuttings 11/27.

- 92/0648 - *Cotoneaster affinis* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0649 - *Cotula dioica* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0650 - *Cryptomeria japonica* 'Kukumiya Sugi' - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0651 - *Cryptomeria japonica* 'Rein's Dense Globe' - UBC Botanical Garden - Vancouver, BC, - Cuttings - 11/27.
- 92/0652 - *Docynia delavayi* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0653 - *Hedera colchica* 'Dentata Variegata' (Adult) - UBC Botanical Garden - Vancouver, BC, - Cuttings - 11/27.
- 92/0654 - *Hedera helix* 'Poetica' - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0655 - *Hedera nepalensis* 'Marbled Dragon' - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0656 - *Hoboellia* sp. (Yellow Fruited) - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0657 - *Ilex leucoclada* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0658 - *Lonicera standishii* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0659 - *Maesa* sp. - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0660 - *Pittospermum subulisepalum* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0661 - *Skimmia laureola* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0662 - *Skimmia pumila* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0663 - *Vaccinium dunalianum* var. *urophyllum* - UBC Bot Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0664 - *Viburnum cinnamomifolium* - UBC Botanical Garden - Vancouver, BC, Canada - Cuttings - 11/27.
- 92/0665 - *Callistemon sieberi* - Wells-Medina Nursery - Bellevue, WA - 1 gal - 11/28. (\$7.95)
- 92/0666 - *Corylopsis pauciflora* - Wells-Medina Nursery - Bellevue, WA - 2 gal - 11/28. (\$14.95)
- 92/0667 - *Corylopsis willmottiae* - Wells-Medina Nursery - Bellevue, WA - 1 gal - 11/28. (\$9.95)
- 92/0668 - *Eurya japonica* 'Winter Wine' - Wells-Medina Nursery - Bellevue, WA - 1 gal - 11/28. (\$6.95)
- 92/0669 - *Evodia daniellii* - Wells-Medina Nursery - Bellevue, WA - 1 gal - 11/28. (\$7.95)
- 92/0670 - *Larix kaempferi* 'Diana' - Wells-Medina Nursery - Bellevue, WA - 3 gal - 11/28. (\$24.95)
- 92/0671 - *Picea montigena* - Wells-Medina Nursery - Bellevue, WA - 2 gal - 11/28. (\$17.95)
- 92/0672 - *Lonicera alseuomoides* - Center for Urban Horticulture - Seattle, WA - Cuttings - 11/29.
- 92/0673 - *Arbutus* X 'Marina' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0674 - *Chamaecyparis nootkatensis* 'Lutea' - Univ. of Wash Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0675 - *Chamaecyparis* X [*lawsoniana* X *pisifera*] - Univ. of Wash. Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0676 - *Cryptomeria japonica* (? spiral form) - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0677 - *Hedera helix* 'Arborescens Golden Form' - Univ. of Wash. Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0678 - *Ilex forrestii* - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0679 - *Ilex* X 'San Jose Hybrid' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0680 - *Juniperus squamata* var. *fargesei* - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0681 - *Salix acutifolia* 'Pendulifolia' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0682 - *Schisandra propinqua* - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0683 - *Solanum jasminoides* 'Variegata' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0684 - *Thuja plicata* 'Collyer's Gold' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0685 - *Thuja plicata* 'Hillieri' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0686 - *Viburnum tinus* 'Lucidum' - Univ. of Washington Park Arboretum - Seattle, WA - Cuttings - 11/29.
- 92/0687 - *Austrocedrus chilensis* - Heronswood Nursery - Kingston, WA - Liners (2) - 12/11.
- 92/0688 - *Maackia tenuifolia* - Nickolas Nickou - Branford, CT - Seed - 12/01
- 92/0689 - *Aesculus discolor* - Woodlander's Nursery - Aiken, SC - Qt. - 12/02.
- 92/0690 - *Aesculus glabra* var. *nana* - Woodlander's Nursery - Aiken, SC - Qt. - 12/02.
- 92/0691 - *Aster carolinianus* - Woodlander's Nursery - Aiken, SC - Qt. - 12/02.
- 92/0692 - *Clethra alnifolia* 'Creel's Calico' - - Woodlander's Nursery - Aiken, SC - Qt. - 12/02.
- 92/0693 - *Cotinus obovatus* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0694 - *Evodia hupehensis* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0695 - *Fagus crenata* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0696 - *Halesia monticola* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0697 - *Halesia parviflora* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0698 - *Itea virginica* 'Longspire' - Woodlander's Nursery - Aiken, SC - Qt. - 12/02.
- 92/0699 - *Lindera megaphylla* - Woodlander's Nursery - Aiken, SC - Qt. - 12/02.
- 92/0700 - *Lindera triloba* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0701 - *Magnolia cylindrica* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0702 - *Magnolia fraseri* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0703 - *Magnolia tripetala* - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0704 - *Wisteria macrostachya* 'Clara Mack' - Woodlander's Nursery - Aiken, SC - Gallon - 12/02.
- 92/0705 - *Cryptomeria japonica* 'Birodo Sugi' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.
- 92/0706 - *Cryptomeria japonica* 'Bloomer's Witches Broom' - U. S. Natl Arb - Washington, DC - 12 cuttings - 12/30.
- 92/0707 - *Cryptomeria japonica* 'Kusari Sugi' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.
- 92/0708 - *Cryptomeria japonica* 'Ogon Sugi' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.
- 92/0709 - *Cryptomeria japonica* 'Pyramidata' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.

- 92/0710 - *Cryptomeria japonica* 'Viridis Form' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.
- 92/0711 - *Juniperus conferta* 'Blue Lagoon' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.
- 92/0712 - *Thuja plicata* 'Extra Gold' - U. S. National Arboretum - Washington, DC - 12 cuttings - 12/30.