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### Friday Morning, December 14, 1979

#### NEW PLANT FORUM

Jack Alexander and Michael A. Dirr, Moderators

MODERATOR DIRR: Our first speaker on this portion will be Dr. Sidney Waxman who has three plants he would like to discuss.

SIDNEY WAXMAN: *Pinus strobus* 'Yu Coon' is a dense fast growing shrub or small tree grown from seed obtained from a witches' broom. Unlike normal white pines, it retains the lower branches. Its dense branching develops naturally without pruning. The dimensions of this plant, after having been grown for 15 years, are 10½ feet tall and 7 feet broad.

*Larix × eurolepis* (unnamed cultivar) is a weeping, spreading tree. Its most interesting characteristic is that the major branches tend to grow horizontally and undulate, while the secondary branches weep. Its winter character is also of interest.

*Sciadopitys verticillata* (unnamed cultivar) has several characteristics that make it desirable. The foliage is deep green. The needles do not bronze in the winter but retain their green color and become glossy. Also this particular tree was selected from among many others because of its ability to root easily. Cuttings taken during the past 10 years have rooted consistently with high percentages.

MODERATOR DIRR: Elwin Orton has one plant to present.

ELWIN ORTON: *Pyracantha coccinea* 'Rutgers' is the result of a cross 14 years earlier. We have had it under test that long and I believe that it will be a replacement for the cultivar 'Lowboy'. In contrast to 'Lowboy', which is extremely susceptible to scab, 'Rutgers' has been absolutely free of scab and fireblight for 14 years.

MODERATOR DIRR: Edmund Mezitt has two *rhododendron* plants he would like to present.

ED MEZITT: The first *rhododendron* is *R.* 'Weston's Pink

Diamond'. This plant is a hybrid derived from breeding a petaloid *R. 'PJM'* seedling with *R. mucronulatum* 'Cornell Pink'. The flower is a pleasing pink and is also petaloid. The plant is slightly evergreen and easily propagated from cuttings.

The second is *R. 'Olga'* which is a cross between a pink form of *R. mucronulatum* and *R. minus*. The cultivar 'Olga' has evergreen foliage, good winter color, and blooms about one week after *R. 'PJM'*. This cultivar is vigorous in growth and the flowers are a deep pink.

MODERATOR DIRR: The next speaker will be Harold Pellett.

HAROLD PELLETT: The first plant is a seedling of *Aesculus sylvatica*. We like it for its foliage characteristics in summer and fall. It holds its foliage all summer and has been free of scorch. The leaves are dark, glossy green in summer and maroon in fall. We are going to submit the name 'Autumn Splendor'.

I would next like to introduce the next plant *Forsythia mandschurica* 'Vermont Sun' for my brother. 'Vermont Sun' is recommended for trial as a substitute for *F. ovata* and less hardy forms of *Forsythia*. Flower buds are cold hardy to about  $-31^{\circ}$  to  $-34^{\circ}\text{C}$  ( $-25^{\circ}$  to  $-30^{\circ}\text{F}$ ) and blooms about one week earlier than *F. ovata* at the University of Vermont Horticultural Research Center in South Burlington. 'Vermont Sun' is a slower grower than *F. \times intermedia* 'Lynwood' and has a mature height and spread of 8 feet.

MODERATOR DIRR: Our next speaker, Gary Koller, has four interesting plants to discuss.

GARY KOLLER: The first plants are grasses. *Miscanthus sinensis* 'Gracilimus' grows to 10 feet with  $\frac{1}{4}$  inch wide leaves and *M. sinensis* 'Variegatus' is noted for leaf blades striped with white or yellowish color. *M. sinensis* 'Giganteus' is another interesting cultivar which grows to 12 feet.

A vine that has done well under dry, shadey conditions is *Ampelopsis brevipedunculata* 'Elegans'. An interesting feature is the white swirl pattern in the leaves and when it is grown properly you get touches of pink.

MODERATOR DIRR: Jack Alexander has a list of plants he would like to present.

JACK ALEXANDER: *Cedrus deodara* 'Shalimar' is a new introduction from the Arnold Arboretum. It is perfectly hardy in the Boston area. The branch tips are slightly pendent. It is probably the hardiest *C. deodara*. Last year we had  $-21^{\circ}\text{C}$  ( $-6^{\circ}\text{F}$ ) and had no damage. We have had some success propagating it from cuttings in the fall using 5,000 ppm 2,4,5-TP.

*Cladrastis lutea* 'Rosea' differs from the species only by the presence of pink flowers.

*Pieris japonica* 'Valley Valentine' grows to be 5 feet high. The plant has dark purple winter buds which open to a dark pink that fades some. The florets are closer to red than 'Valley Rose' or 'Flamingo'. The new growth comes out red. If you want propagating material contact Bob Ticknor, N. Willamette Exp. Station, Amora, Oregon 97002.

The next plants were provided by the Soil Conservation Service.

*Juniperus conferta* 'Emerald Sea' reaches 1 to 2 feet and has a spread of 8 to 10 feet. Its main attribute is the fact that it retains its blue-green color throughout the winter. It is hardy to  $-23^{\circ}\text{C}$  ( $-10^{\circ}\text{F}$ ) and tolerates salt spray. The plant is recommended for sandy soil and it also tolerates drought well.

*Populus*  $\times$  *canadensis* 'Imperial' is a male cultivar recommended as a windbreak and is hardy to  $-34^{\circ}\text{C}$  ( $-30^{\circ}\text{F}$ ). This plant is very fast growing, up to 4 feet a year. The plant has an ultimate height of 50 to 80 feet and it maintains a columnar habit. Rodents and deer can damage the plant.

*Salix purpurea* 'Streamco' is a shrub which is recommended for stream bank plantings. The plant is easily propagated from cuttings and does well in wet locations.

MODERATOR DIRR: I have a few plants that I would like to present.

*Pyrus calleryana* 'Whitehouse' was released in 1978 by the USDA. The plant is supposedly distinctly upright and maintains a central leader. You can obtain scion wood from the U.S. National Arboretum, Washington, D.C.

*Viburnum plicatum tomentosum* 'Shasta' is a low growing type to 6 feet and almost twice as wide with distinct horizontal branching. The flowers are the main asset. The sterile florets are almost 2 inches across. It is hardy to USDA zone 5b.

MODERATOR DIRR: Dixon Hoogendorn has two plants to present.

DIXON HOOGENDORN: *Ilex verticillata* 'Compacta' is much slower growing and more compact than other *I. verticillata* cultivars. It also is self pollinating. The bright red fruit is long lasting. It can be propagated by softwood cuttings taken in June.

*Rhododendron* 'Silvery Pink' is a compact, evergreen plant with small leaves and silvery pink flowers. The plant is quite conspicuous from a distance. We have had two severe winters in a row with temperatures down to  $-26^{\circ}\text{C}$  ( $-15^{\circ}\text{F}$ ) and we saw

no evidence of bud blast or leaf injury. The bloom period is 7 to 10 days after R. 'PJM'.

MODERATOR DIRR: Joe McDaniel has three plants to present.

JOE McDANIEL: *Maclura pomifera* 'Altamont' is the name of a thornless selection of osage orange that I have selected. The plant is a staminate form and has a more upright branching habit than is usual for the species.

*Magnolia* 'Spring Joy' is a cross between *M. kobus* var. *stellata* 'Royal Star' and *M. 'Wada's Memory'*. *M. 'Spring Joy'* has more tepals than *M. 'Wada's Memory'* and the flower opens later than *M. 'Royal Star'*. Its color is prevailingly white with a touch of pink at the base. *M. 'Spring Joy'* will mature larger than *M. 'Royal Star'* which is one of the more vigorous *M. kobus* var. *stellata* cultivars.

*Magnolia* 'Paul Cook' is the result of a cross between *M. sprengeri* and a seedling of *M. × soulangiana* 'Lennei'. This cultivar has been hardy through all the bad winters at Urbana, Illinois. It has light pink blooms, as much as 11 inches across, which are borne on stronger growing trees than *M. × soulangiana*.

## BACK TO THE BASICS OF ROOTING

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The phenomenon which nurserymen call rooting is really a combination of several processes and chemical interactions, often separated into root initiation and root development. In the first, cells capable of rejuvenating and becoming meristematic, receive appropriate chemical signals and start dividing. In the second, these meristematic groups of cells called root initials respond to different sets of signals and continue division and elongation into young roots, aided by factors in the environment.

Physiologists ask the nature of the signals, which cells perceive them, and why root cells are produced and not some other type. These are important considerations, because the theory of totipotency suggests that all cells in plants have the

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