

treated with 1% IBA plus 5% Captan. There was a marked inhibition of top growth on the cutting in the bench while they were rooting where they had been treated with Captan. This was of real value because this variety naturally makes early growth in the bench and certainly cuttings put in that late are very subject to growth in the bench at that time of the year. After the cuttings were moved on there was no further inhibitory effect on the development of the cuttings.

HUGH STEAVENSON: I would like to ask Dr. Stoltz or Dr. Whatley if there is any possibility that DMSO will be used commercially.

LEN STOLTZ: Based on the work I have done I would say probably not with the materials we have tried so far. Also there is some concern with its danger. So many people who have worked with DMSO have had an impairment of vision, usually when relatively high amounts are absorbed.

BOOKER WHATLEY: There is some indication from the limited number of tests we have conducted that you may be able to use a lower concentration of auxin when supplied in combination with DMSO.

VINCE BAILEY: I would like to ask Mr. McGuire about the terminal application of hormones. Was any of the terminal tissue removed before application?

JOHN MCGUIRE: Nothing was taken off the terminal portion of the cuttings.

RALPH SHUGERT: Has anyone used Captan and an auxin on pfitzer cuttings?

JOERG LEISS: We have made up a powder consisting of IBA, NAA, Captan, and Ferbam and it gave us good results.

The following session, moderated by Mr. Roy Nordine, was the first presentation of plant material worthy of introduction to the trade.

ROY NORDINE: The plant material described this afternoon from arboreta will be available at your request for propagation-seeds, cuttings, or whatever it happens to be. Nurseries, of course, are allowed to sell their plant material. (Editor's Note: The following plant material was presented.)

CERCIS "OKLAHOMA"

Cercis "Oklahoma" was discovered in Spring 1964 in the "Arbuckle Mountains" of Oklahoma. The flowers are a rich wine red over the entire bloom. The leaves are almost round, heavy textured with a glossy sheen that appear to be waxed. The leaves are closely spaced creating a neat appearance throughout the growing season. The trees start blooming at one year and bloom heavily at an early age. This tree seems to grow more compact and will probably not grow as large as the *Cercis canadensis*.

The "Oklahoma" Redbud is thought to be a natural hybrid between *Cercis reniformis* and *Cercis canadensis* having some characteristics of each. The best method of propagation

is by T-bud in late summer. In our area, late July to early August is the best period. It can be grafted on started understock in the greenhouse with a side graft as with evergreens. The grafts are quite slow to produce a planting size tree. The name *Cercis* "Oklahoma" has been registered with the Arnold Arboretum.

The following plants were described by Harrison Flint, The Arnold Arboretum, Harvard University, Jamaica Plain, Mass.

Indigofera incarnata alba. There is nothing really new about this plant, but it has been overlooked. It was first obtained by the Arnold Arboretum in 1885 from Veitch and Sons, Chelsea, England, and after 80 years it still is not found in nurseries in this country. *Indigofera incarnata alba*, like *Indigofera kirilowii*, is a good plant for stabilizing slopes, one of our best ground covers for bank use. It is a little lower than *I. kirilowii*, however, seldom exceeding 18 inches in height and has white flowers.

Propagation: Division of underground stems, or softwood cuttings in June or July.

Hamamelis 'Arnold Promise'. This hybrid witch hazel originated as a seedling in the Arnold Arboretum in 1928 and was named in 1963. It is a hybrid of *H. mollis* and *H. japonica*, and is outstanding for its large brilliant yellow flowers, borne in clusters of three, appearing in Boston in early March. In some years it has good reddish-orange fall foliage.

Propagation: Softwood cuttings in June. Hold rooted cuttings over winter without disturbing their roots, if possible.

Rhododendron 'Smoky Mountaineer'. This cultivar was selected from a group of *Rhododendron calendulaceum* seedlings in the Arnold Arboretum in 1941. Its flowers are similar to those of *R. calendulaceum* in size and shape but their uniform, strong red-orange color does not fade in the sun. A more detailed information sheet is available from the Arnold Arboretum.

Propagation: Softwood cuttings in early summer.

The following plants were described by Roy Nordine, The Morton Arboretum, Lisle, Illinois.

White Ash — *Fraxinus americana*

A large tree native over the eastern half of the United States and adjacent Canada. Frequently confused with Green Ash. White Ash develops early into a uniformly branched and very shapely tree, oval in shape. Fall color is usually a deep purple, sometimes yellow and purple. Propagate by seeds sown either in fall or spring or budded on any ash seedling in late summer. Hardy in Zone 4.

Dwarf European Cranberry, *Viburnum opulus compactum*

A dwarf form of the European High Bush Cranberry. Mature height not known, 12-year old plants are 4 feet high.

A fine, rounded shrub with branches from the ground. Flowers and fruits annually at an early age. Propagates by summer cuttings from June 15 to early August. Hardy to Zone 4.

Yellow Japanese Barberry — *Berberis Thunbergi aurea*

A Japanese Barberry with fine, clean bright yellow foliage that tolerates full sun with very little burning. Mature height somewhat less than the types species. Propagates by summer cuttings from June 15 to early August. Zone 4.

Bottle Brush Buckeye — *Aesculus parviflora*

A shrubby species native to the Southeast. Mature height in our collection is 6 feet and wider than high where room permits. Large, bold foliage, white spiked flowers in late June and excellent yellow fall color. Fine rounded shrubs with branches from the ground under all types of shady locations. Propagates by layers made in early June. Summer cuttings from June 15 to July 15 and seeds that must be sown as soon as ripe in late September. Zone 5.

Dwarf European Fly Honeysuckle — *Lonicera xylosteum nana*

This dwarf shrub develops very quickly into a plant under 4 feet, but much wider. An excellent foliage plant with large deep green leaves. Flowers are cream or pale yellow; fruit has not been noticed. Propagate by greenwood cuttings from June 15 to August 1. Zone 4.

Canby Pachistima — *Pachistima Canbyi*

In our extensive collection of grounds covers, this plant is the finest. It has all the qualities necessary for a perfect plant. Small, graceful branches and stems on a plant less than a foot high, dark green small narrow evergreen leaves that never brown. It will perform well in sun to the deepest of shade. Propagates easily by cuttings taken after the spring flush has hardened until late in the winter. Summer cuttings root in less time. Zone 4.

(Zones are for the USDA Zone Map)

The following plants were described by Rod Bailey.

Philadelphus "Miniature Snowflake" — This plant is a sport of Philadelphus "Minnesota Snowflake". The flowers are double and very fragrant. The foliage is dark green and resistant to many of the leaf diseases that attack most Philadelphus species. It is a dense growing dwarf shrub attaining a height of about 30 inches.

Potentilla tridentata — Wineleaf Cinquefoil. This plant is a native of Minnesota and will withstand temperature of 40° below zero. The foliage is a dark shiny green and remains evergreen even at 40°. The ultimate height of the plant is about six inches and produces an abundance of delicate white flowers in mid-summer. It can be used as a ground cover or as a dwarf border shrub and works very nicely in rock gardens.