

NEW FORMS OF DECIDUOUS AND EVERGREEN PLANTS

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In the very limited time allotted to this discussion I am taking the liberty of limiting it to "Some Recommended Uncommon Shrubs and Small Trees." On the mimeographed list that is being distributed, I have listed 75 different plants in this category. There are several others that could be added that are equally satisfactory for landscape purposes.

Before I show the slides and discuss some of these shrubs and small trees let me comment briefly on the "Quality" of plants. Quality is somewhat of an elusive term, but as it applies to ornamental plants for landscape purposes it should include the characteristics of 1) Hardiness, 2) Adaptability, 3) Durability, 4) Requiring little maintenance, and 4) Possess good habit of growth, outstanding foliage, attractive flowers and prominent fruits.

With these points in mind, I will turn to the slides and plant discussions. The following are comments about some of the plants illustrated and discussed.

LOW SHRUBS — 1½ - 4 feet

1. *Caragana frutex* 'tidy' — Tidy Peashrub

Small, upright spreading shrub to 4 feet with fine textured foliage. Flowers bright yellow in May and June. A good small shrub for dry, sunny situations.

2. *Cotoneaster adpressa praecox* — Early Cotoneaster

Low prostrate shrub to 2 feet with small, dark, glossy green leaves, small pink flowers, and bright red fruit which are larger than the species. A fine shrub for edging, foundation planting, and rockeries.

3. *Hypericum kalmianum* — Kalm St. Johnwort

Small, upright shrub to 3½ feet with bluish green leaves, 1 to 2 inches long. Leaves glaucous beneath. Flowers yellow in July and August. One of the hardiest of the Hypericums. Adaptable to sunny or semi-shaded situations.

4. *Physocarpus monogynus* — Mountain Hinebark

Small shrub to 3 feet with spreading and somewhat arching branches, small leaves, and an abundance of small pinkish white flowers. A soil tolerant shrub which will do well in sunny or shady situations.

5. *Viburnum opulus* 'Compactum' —

Compact European Cranberrybush

A low, compact, rounded bush to 2 or 3 feet, with attractive white flowers and red fruits. A superior plant to the more common *Viburnum opulus* 'Nanum' which seldom flowers or fruits.

SMALL SHRUBS — 4 - 6 feet

6. *Clethra alnifolia* 'Rosea' — Pink Summersweet Clethra
Upright spreading shrub to 6 feet with glossy leaves and pinkish white, fragrant flowers borne in terminal racemes. Excellent shrub for moist, partially shaded situations.
7. *Cotoneaster multiflora calocarpa* —
An upright spreading shrub to 6 feet with arching branches, attractive foliage, handsome white flowers, and red fruits which are produced very freely. A good shrub for specimen and mass planting.
8. *Hydrangea quercifolia* — Oakleaf Hydrangea
An upright shrub to 5 feet with reddish tomentose spreading branches, large, dark green leaves which are whitish underneath, and with large panicles of white flowers. Reddish or purplish fall color. An excellent shrub for planting in partial shade where bold effects are desired.
9. *Syringa microphylla* 'Superba' — Superba Littleleaf Lilac
A small shrub of upright growth habit to 4 or 5 feet with small leaves and dainty pink flowers in late May. Use in sunny situations and in well drained soil. A good addition to the lilacs for small specimen and border planting.
10. *Viburnum dilatatum xanthocarpum* —
Yellowberry Linden Viburnum
A yellow fruited form of the popular Linden Viburnum. A plant that may reach 8 feet but usually much smaller. Upright, bushy in its growth habit, with attractive foliage turning bronzy red in autumn, white flowers in May and the yellow fruits in September remaining on the plant until early winter. Best used in sunny situations in fertile soil.

MEDIUM SHRUBS — 6 - 10 feet

11. *Euonymus sachalinensis* — Sakhalin Euonymus
Upright, spreading shrub to 10 feet with rather large obovate leaves to 3½ to 4½ inches, turning reddish purple in the fall. Fruit bright red, 5-angled and produced abundantly in drooping clusters. A good plant as a specimen or for border planting.
12. *Malus sargentii* 'Rosea' — Rosy Sargent Crabapple
Low, horizontally spreading tree-like shrub to about 6 feet high and 18 to 20 feet spread. Excellent habit of growth, good foliage, and abundance of rosy pink flowers in May and followed by many dark red fruits that persist until winter. The best of the small crabapples and one of the best medium sized plants. Does well in average soil and in sun or partial shade. Excellent as a specimen or as a hedge plant.
13. *Philadelphus* 'Mrs. Thompson' —
Mrs. Thompson Mockorange
One of the smaller Philadelphus reaching a high of 6

to 8 feet. Much better habit of growth than most of the Mockoranges, with low branches and good foliage to the base of the plant. Flowers pure white in late May, single and fragrant. Use in well drained soil and sunny situations, as a specimen or border plant.

14. *Viburnum sargentii flavum* —

Yellow Fruit Sargent Viburnum

An upright spreading plant to 8 to 10 feet with somewhat corky branches and thick, waxy, bright green leaves. The leaves are lobed with the center lobe elongated and essentially entire. Flowers white in cymes, produced in late May to early June. Fruit yellow, differing in this respect only from the species. An excellent shrub to use in good soil and in sunny or in shaded situations.

15. *Viburnum tomentosum* 'Roseum' —

Pink Doublefile Viburnum

All plantsmen are familiar with the Doublefile Viburnum, *Viburnum tomentosum*, one of the real outstanding shrubs. The Pink Doublefile Viburnum is similar to the species in all respects except the flowers are rosy pink.

LARGE SHRUBS OR SMALL TREES — 10 - 25 feet

16. *Acer buergerianum* — Trident Maple

A small tree to 15 to 18 feet with rounded habit of growth. Leaves 3-lobed with the center lobe somewhat elongated. Leaves dark green above glossy, and pale green beneath. Excellent foliage turning reddish orange in the fall. Hardy to 20° F. below zero in well drained soil. An excellent small specimen tree.

17. *Acer griseum* — Paperbark Maple

An excellent small tree to about 25 feet with rounded, compact top. The cinnamon brown, papery bark is the most attractive feature of this plant. The bark is particularly outstanding on the main trunk and large branches and adds a very pleasing note to the winter scene. The compound leaves are composed of 3-leaflets which are dull to semi-glossy green and coarsely toothed. The Paperbark Maple is a hardy small tree that should be used much more extensively as a specimen plant.

18. *Crataegus ambigua* — Russian Hawthorn

A small tree to 12 to 16 feet with wide spreading branches with bark that is mottled brown and green. The leaves are deeply lobed, dark green and attractive, turning bronzy red in the autumn. The flowers are white followed in the autumn by attractive red fruits. *Crataegus ambigua* is one of the real good Hawthorns with good habit of growth, attractive bark, good foliage and interesting flowers and fruit. This plant is hardy to 20 and 25° F. below zero and will do well in average soil. Use as a specimen or border plant.

19. *Hamamelis mollis* — Chinese Witchhazel

A large shrub or small tree to 25 to 30 feet with densely hairy branches and large, rounded leaves, 4 to 6 inches long, densely hairy beneath, normally dark green but becoming a beautiful orange yellow in the fall. The flowers are golden yellow produced in late winter. The Chinese Witchhazel will do well in sun or shade. It is one of the most outstanding of the Witchhazels and should be used in our landscape plantings much more often than it has been in the past.

20. *Koelreuteria paniculata fastigiata* —

Upright Panicked Goldenraintree

This small tree is a narrow columnar variety of the common Panicked Goldenraintree. The foliage, flowers and fruits are typical of the species; the variety differing from the species only in habit of growth. An attractive, narrow columnar, yellow flowering small tree to 15 to 20 feet.

21. *Malus*, 'Snowdrift' — Snowdrift Crabapple

There are many excellent small to medium sized flowering crabapples but I will mention only two of the newer introductions. The Snowdrift Crabapple is quite upright in its habit of growth, probably becoming about 25 feet at maturity. It has an excellent habit of growth, attractive foliage and a mass of beautiful white flowers that show a little pink color in bud. The fruits are small, produced somewhat sparingly and are reddish yellow in color. This should be a type of crabapple that is adapted to street planting.

22. *Malus*, 'White Angel' — White Angel Crabapple

One of the most attractive crabapples is the newly introduced White Angel cultivar. The plant is a small tree, about 20 feet in height and approximately as broad as high with a rounded head. It produces a great abundance of white flowers and small red fruits that persist until nearly spring. One of the most beautiful of the small flowering trees.

23. *Pyrus salicifolia* — Willowleaf Pear

An upright small tree to 20 to 25 feet with somewhat pendulous branches and narrow, grayish green leaves. The young leaves are especially attractive with an abundance of white tomentum. The flowers are white, typical of most pears and the fruits are usually less than an inch in size. The Willowleaf Pear is hardy and does well in average soil. It may be somewhat straggly when young but eventually makes a small tree much superior to the Russian Olive where gray foliage is desired.

24. *Rhamnus frangula* 'truehedge' —

Truehedge Glossy Buckthorn

The Truehedge Glossy Buckthorn is a narrow upright cultivar of the species with similar bark, foliage, flower

and fruit characteristics. It varies from the species in its habit of growth, becoming a narrow column to about 12 to 15 feet but can be easily restrained to lower heights. It may become a little leggy with the base sparsely branched and with little foliage. It does, however, make a good narrow plant for screen purposes.

25. *Symplocos paniculata* — Asiatic Sweetleaf

The Asiatic Sweetleaf is a large shrub or small tree to 30 feet or more but most often is within the 8 to 12 feet range. It is slow growing but makes an attractive rather stiff, wide spreading plant eventually. The leaves are 2 to 3 inches long, bright green in summer and reddish yellow or purple in the fall. The flowers are small, white and fragrant but not particularly outstanding. The most attractive characteristic of the plant is the abundance of small bright blue fruits produced in the fall. It is, perhaps, the most outstanding shrub or small tree that we have with blue fruit. It is hardy, does well in sun or partial shade and is worthy of much more extensive use in the landscape, either as a specimen, as a border plant or for hedge purposes.

MR. CHARLES TOSOVSKY: Thank you very much, Chad. The final paper of this afternoon's session is by Roy Nordine, from the Morton Arboretum.

**ORGANIZED AND UNIFORM TESTING AND EVALUATION
OF NEW CULTIVARS**

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My remarks and development of this topic will be limited to the geographical area of the Eastern region of our Society.

Instead of proposing a program with definite forms and plans to implement a testing program, I will review briefly the past, present and future of work with woody ornamentals.

A tremendous amount of effort by many agencies and individuals has been devoted to testing woody ornamentals. New programs and new areas for future development appear each year.

One of the leaders in the introduction and dissemination of new plants has been our Department of Agriculture. In 1898 a separate section was created in the Department for the introduction of plants new to this country. This section is now called, "New Crops Research Branch." Mr. C. O. Erlanson is the director. This agency has brought in more than 285,000 new plants to date. Most of these new introductions are agriculturally economic plants, grains, grasses, forage, fiber, oil, vegetable,