

ORNAMENTAL SHRUBS . . . FOR MICHIGAN

by
Carl S. Gerlach



Forsythia



Mock Orange



Manchu Cherry

Ornamental Shrubs For Michigan

By CARL S. GERLACH¹

People have a natural desire to improve and beautify their surroundings. When he develops land for human use and enjoyment, the designer or landscape architect uses plants and other elements of design to create functional and pleasant areas.

Attractive flowers, colorful fruits, and brilliant foliage of shrubs are especially useful in landscape planning. Many shrubs are native to Michigan and are worthy additions to any garden. Far more of them, though, have come from similar climates the world over.

You can move native shrubs such as dogwoods, sumacs, and viburnums from their natural habitat to your own garden if you take them when they are young. However, this practice has certain disadvantages. The plants have not been root pruned nor given the attention of nursery-grown stock and so are harder to move successfully. Since there is also a chance of spreading plant diseases, it is unlawful in Michigan to move plants unless they have been inspected. The Michigan Department of Agriculture, Division of Plant Industry, in Lansing, controls plant inspections. You should consult that office before you move native plants.

Most ornamental shrubs come from abroad

Most shrubs of ornamental value have been brought to this country from other parts of the world—particularly the Orient. We owe a great debt to plant collectors like Charles Sprague Sargent, Ernest Henry Wilson, and others who have traveled extensively in the Orient. They have brought back such lovely plants as the forsythias and the magnolias. We are also indebted to plant hybridizers, especially Victor Lemoine and his family. These scientists have improved the strains of both imported and native plants to be of greater ornamental value.

In this circular we shall discuss the shrubs which are hardy in Michigan and which you can probably buy at your local nursery. The choice is limited to those which have proven over a long time to be worthy ornaments. We shall not discuss them from the botanist's point of view; rather, we consider their effect from a landscape architect's point of view. Therefore, if several plants of the same genera (Honeysuckle, for instance) give the same effect, we list only the best species.

Plant list tells ornamental highlights

In describing the plants, we have used simple, non-technical terms wherever we could. If you want a more scientific description of a plant, consult a botanical encyclopedia. In discussing each plant, we mention its most outstanding ornamental characteristics in great

detail. We also discuss usage and list the cultural requirements. If no particular mention is made of the flowers, fruits, or other characteristics, it is because they are so few in number or so inconspicuous that they are of little ornamental value.

Although common uses for each shrub are listed, ingenious designers will find many more uses. Study the descriptions of the shrubs and make tentative selections which seem to fill certain requirements. Examine unfamiliar plants in a nursery or botanical garden; seeing a different plant will often awaken your imagination and you will be able to use it in an unexpected and refreshing way. By doing this, you won't limit your choice to old favorites; and you may create effects with unusual plants which do not appear in every garden.

Consider all features in picking shrubs

To do this is as much a creative effort as painting a picture or composing music. Consider all ornamental characteristics—flowers, fruit, color and texture of foliage, and winter effect—when you select shrubbery; you can achieve plantings which are pleasingly varied and interesting in all seasons of the year. You will solve problems of foundation plantings, screening, and division of areas at the same time.

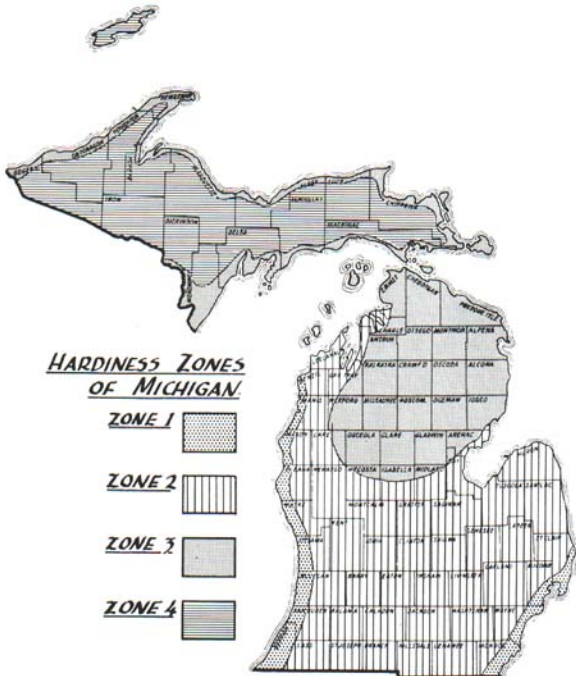
You must recognize a plant's limitations as well as its possibilities, to use it in your design wisely and artistically. The soil, moisture conditions, and exposure are discussed and should be carefully noted. A shrub may grow in adverse conditions, but it will seldom thrive. A common, inexpensive shrub, flourishing in ideal conditions of soil and situation, can contribute more, ornamentally, than a rare and expensive one which, though beautiful in its natural habitat, is struggling for existence in an unnatural situation. If, however, you want a plant for which ideal conditions are not available, a young one will more easily adapt itself to the situation. The older the plant, the greater the shock in moving it and the more attention it will require. Unless the homeowner wants to become a slave to his garden, the fewer plants he has which require special care the happier he will be.

Use zone map to learn plant hardiness

Climate is important in growing shrubs. In the descriptions of the shrubs, the hardiness of the plants is indicated by numbers which refer to the climatic zones of the state as shown on the map. The least hardy will grow only in zone 1; those less subject to winter damage will grow in zones 2 and 3; and only the very hardy ones are listed in zone 4.

These zoning lines are necessarily rather general. There is overlapping near the extreme northern and southern limits of each zone because of the land eleva-

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Map of Michigan showing zones for ornamental shrubs. Refer to this map when considering the plants described in the following section.

tion and the location of the plant. Frosts, for instance, are earlier in the fall and later in the spring in lowlands. A shrub listed only in zone 1 might grow in zone 2 if given a sunny location and protected from harsh winter winds and spring frosts.

In dry soils, the plants will become dormant earlier in the fall and are less likely to be damaged by early winter freezes. In moist soil, however, the growth remains succulent late in the season and frost may do considerable damage. During mild springs, plants shoot out new foliage early and a late freeze will do a great deal of damage.

Use the zoning map only as a general guide for temperature conditions. Other conditions may in some cases change the picture.

Prune shrubs for best effect

Pruning is another important part of maintenance—a weedy, overgrown garden is not attractive, no matter how good the basic design. That seasonal change in plants—a sort of fourth dimensional quality—continually changes the form and makes pruning a necessity. This is not a hard task since it usually needs to be done only once a season. But, it must be done.

There is one word of caution, however. You should not, except in the cases of clipped hedges, rely on pruning to change the natural shape or size of a plant. In the plant descriptions, the growth habit of each shrub is given, and its average height at maturity immediately follows the botanical name of the shrub. Consider these factors before choosing a shrub.

Pruning for shapeliness, however, is desirable. Prune out all old, dead, or partially dead wood for neatness and plant health. Some shrubs which grow rapidly and those which become straggly with age need corrective pruning. Since shrubs are informal in outline, prune so as to retain the natural shape of the shrub.

Occasionally in older plantings, shrubs like the honeysuckle may have grown out of scale or may have assumed an unattractive shape through neglect; they will require pruning for rejuvenation. You can cut them to the ground and a completely new shrub will grow. It is far more desirable, however, to do this pruning over a period of about 3 years, cutting out one-third of the old wood the first year, one-third the second, and the remaining third in the third year. By pruning in this manner, a completely new plant will grow while avoiding unsightly gaps in the border.

Blossoming time sets pruning schedule

Pruning shrubs which are grown chiefly for their ornamental flowers varies according to the time of blooming. The early flowering types, like the forsythias, lilacs, and quince, form their flower buds on last year's wood; prune them after flowering. You can prune the later flowering types, such as mockorange, butterfly bush, and the hydrangeas, in the spring. They blossom in the summer since their flower buds form on the current season's growth.

There is much of science and much of art in creating a garden. Some may wish only to plant a few shrubs

in front of the house to make it look better from the street. Few, however, are willing to stop there. Working with a few flowers and shrubs in a garden seems to lead one on with the desire for further adventure with more of them.

A garden is rewarding in many ways. As sheer physical exercise it rivals the milder sports. The materials from which it is constructed usually increase in value as well as beauty with the passing years. It should not, however, be a hit-and-miss affair. A well-planned, functional design should be prepared, either by the gardener or, preferably, with professional help, and materials should be chosen with care. The result should then be a useful, pleasing and beautiful place in which to live.

Facts about shrubs appear in this order

Facts about each shrub are in this order: Botanical name, average height of the plant, zones where it will grow, and common name. (Botanical names are according to the latest edition of "Standardized Plant Names," an authority accepted by nurserymen, botanical gardens, and arboretums.)

In the list of zones where the shrub will grow, a question mark following a zone number means that the plant's hardiness in that zone is questionable.

The main ornamental characteristics are described next, followed by a brief description of other characteristics. The cultural needs and landscape value of each shrub are given last.

Plant Names and Descriptions

Acanthopanax sieboldianus (A. pentaphyllum)

8 ft. Zones 1, 2, 3, 4 FIVE-LEAVED ARALIA

FOLIAGE—Glossy, light green leaves are palmately compound, have five to seven leaflets; remains green well into the fall.

The Five-leaved Aralia is an upright shrub with slender arching branches that are armed with prickles. It has a suckering habit of growth. The Aralia grows well in sun or partial shade and in a great variety of soils; it does well in smoky cities. It is valued chiefly for its clean foliage and ability to grow in poor conditions. Use it for screening, slopes, and for sheared hedges.

Aronia arbutifolia

6-8 ft. Zones 1, 2, 3 RED CHOKEBERRY

FRUIT—Bright red berries in the fall which persist through the winter.

FOLIAGE—Deep green color during the summer, turning a rich crimson in the autumn.

This is an erect-growing, slender-branching, round-topped shrub that prefers moist situations but grows well in average soil in sun or partial shade. The small white flowers in late May are not very showy. It is used in shrubbery borders, masses, and naturalistic plantings.

The Black Chokeberry, *A. melanocarpa*, is hardier, lower growing, and has black fruits.

BARBERRIES

Berberis

The barberries are a very useful group of evergreen and deciduous shrubs. Many of the deciduous species, especially the Common Barberry (*Berberis vulgaris*), are host plants for the black stem rust of wheat and other cereals. The United States Department of Agriculture has outlawed these in Michigan and other wheat-growing areas. There are, however, several good deciduous species like the Japanese Barberry (*B. thunbergii*) and the evergreen barberries that are sufficiently



Fig. 1. The bright red berries of the Red Chokeberry are quite showy. The foliage also colors red in the fall.

rust-resistant to be approved for planting by the USDA. Only the approved species are listed in this bulletin.

The barberries have small yellowish flowers that are usually hidden by the foliage, thus offering little ornamental interest. The deciduous species have bright red berries that hang on all winter. The evergreen types usually have purplish berries that either are eaten by the birds or fall quickly after ripening.

All of the barberries have sharp thorns along the branches and make good barrier plants. The evergreen species also have spiny foliage much like a small holly leaf. The foliage of the deciduous types turns brilliant red or orange-red in the fall.

These shrubs are quite tolerant of growing conditions, growing in almost any type of soil in either full sunlight or in the shade. The Japanese Barberry, in fact, is one of the most versatile shrubs and is probably used more than any other.

Berberis julianae

6 ft. Zones 1, 2 WINTERGREEN BARBERRY

FOLIAGE—Glossy evergreen leaves have spiny margins, are 2 to 3 inches long, and are arranged in clusters along the branches.

FLOWERS—Yellow flowers in clusters that appear in mid-May make a very colorful contrast against the glossy green leaves.

Named for Princess Juliana of the Netherlands, this barberry is an upright grower with branches that spread out to make a densely foliated shrub. It prefers a good soil and protection from the winter. This barberry is the best of the evergreen barberries, and where it is hardy, it makes a good display all year.

Berberis mentorensis

6 ft. Zones 1, 2, 3 MENTOR BARBERRY

FOLIAGE—The leaves have a spiny margin, are 1 inch long, and have a good green color in the summer which turns bronze-red in late autumn. In milder climates, the foliage remains green throughout the winter.

This barberry, a hybrid shrub (*B. julianae* X *B. thunbergi*) is often mistaken for the Japanese Barberry. It is, however, coarser in texture and does not have the colorful red fruits in the winter. A much-branched shrub, it is erect in youth, spreading out with age and making a densely foliated plant. It is useful as a hedge, as a foundation plant or in a border planting.

Another hybrid, *Berberis horvathi*, is very similar to the Mentor Barberry but, supposedly, is more hardy.

Berberis thunbergi

6 ft. Zones 1, 2, 3, 4 JAPANESE BARBERRY

FOLIAGE—Leaves are small, 1 inch or less, and quite variable in outline. Good green color in summer turns bright shades of red, orange-red and orange in autumn.

FRUIT—Bright red oval berries about 3/8 of an inch long profusely produced along the branches persist



Figs. 2 and 3. The small yellow flowers and attractive red berries of the Japanese Barberry make this versatile shrub a worthy addition to any garden.

throughout the winter and make a colorful display against evergreens or snow. Some strains have more berries than others.

The Japanese Barberry is one of the most colorful shrubs, effective at all seasons. It grows in almost any type of soil, in full sunlight or shade, and tolerates dry as well as moist situations. A densely foliated shrub, it branches to the ground. The flowers are pale yellow, tinged red on the outside. They appear in mid-May, but are almost hidden by the foliage. The shrub is useful in many ways: hedges, undergrowth, and foundation plantings.

VARIETIES—

B.t. atropurpurea. Redleaf Japanese Barberry. Similar to the species except the foliage is reddish-purple all season if grown in sunny places (green in shade).

B.t. erecta. Tru hedge Columnberry. Upright habit of growth; good for a narrow hedge.

B.t. minor. Box Barberry. Smaller than the species in all characteristics: height, foliage and fruit. Some nurseries are offering a dwarf red leaf strain called "Crimson Pygmy" which makes excellent low hedges.

Berberis verruculosa

4 ft. Zones 1, 2 WARTY BARBERRY

FOLIAGE—Evergreen leaves 1 inch long have spiny margin and leathery texture; they are dark green above and whitish beneath.

FLOWERS—Golden yellow, 1/2 inch across, are showy in mid-May.

A neat, dense-growing shrub valued for its leathery evergreen leaves. It is likely to burn in winter sun.



Fig. 4. The lilac-purple flowers of the Fountain Butterflybush cover the outer margin in mid-May.

The Paleleaf Barberry (*Berberis candidula*) is much like the Warty Barberry but is smaller and denser in habit of growth. It is preferred where a low plant under 2 feet in height is desired.

Buddleia alternifolia

10 ft. Zones 1, 2 FOUNTAIN BUTTERFLYBUSH

FLOWERS—Clusters of bright lilac-purple flowers are borne in mid-May on previous season's branches; it is earliest of the buddleias to bloom.

The Fountain Butterflybush is aptly named, for its wide-spreading, arching branches do give it the appearance of a large fountain. The foliage is a gray-green color. It thrives in poor, well-drained gravelly soils, but requires ample room, full sunlight and good air circulation for best flower display. It is useful as a specimen or as an accent plant.

Buddleia davidi

4-8 ft. Zones 1, 2 ORANGE-EYE BUTTERFLYBUSH

FLOWERS—Upright spikes of fragrant, lilac flowers with orange centers bloom in August.

This is a coarse-growing, irregular shrub valued for its late blooming season. Although it usually winterkills to the ground in Michigan, it grows vigorously and will usually attain a height of 3 or 4 feet in one growing season. It is best used as a tall perennial in front of other plants.

VARIETIES—

- B.d.* Charming—pink flowers.
- B.d.* Dubonnet—dark purple flowers.
- B.d.* Isle de France—deep purple flowers.
- B.d.* White Bouquet—white flowers.

Buxus sempervirens

10 ft. Zones 1, 2 COMMON BOX (Boxwood)

FOLIAGE—Evergreen and leathery, the dark lustrous green leaves are about 1 inch long.

The Common Box, a native of southern Europe, northern Africa and western Asia, had been cultivated for many centuries in European gardens before being introduced into North America. It was brought to this country in early colonial times and today there are fine old specimens and hedges of box in the formal gardens at Mt. Vernon, Williamsburg and other coastal towns. The box is a compact, erect-growing, symmetrical shrub that takes many years to develop into a large plant.

It is a very slow grower. Plants 6 feet tall are rarely found in Michigan, and then only in the lower part of the state. A hardy strain of the Common Box grown at East Lansing for the past 25 years is only 3½ feet tall.

The box have very compact, surface-feeding roots and grow best in a cool, moist, well-drained soil in a sheltered and partially shaded situation. It is also advisable to mulch them with peat or leaf mold. They stand shearing and lend themselves admirably to clipped hedges. Where they are hardy, no other evergreen shrubs can compare with their symmetrical shape and clean, glossy foliage.

VARIETIES—

B.s. handworthii—a vigorous growing upright type with darker green foliage; it is excellent for hedges.

B.s. myrtifolia—a low shrub with small leaves ½ inch long; it is very hardy.

B.s. suffruticosa—a true dwarf or edging box; it is excellent for low hedges; very compact and slow growing.

Another box, *B. microphylla koreana*, the Korean Little-leaf Box, is a dwarf variety that has proven to be the hardiest of all of the box.

Caragana arborescens

15-20 ft. Zones 1, 2, 3, 4 SIBERIAN PEASHRUB

FLOWERS—Yellow pealike flowers in mid-May are partly hidden by the foliage.

The Siberian Peashrub is an upright-growing shrub or small tree with several main trunks. The fine-textured



Fig. 5. The Siberian Peashrub is valued chiefly for its ability to grow in dry, sandy soils.

foliage is light green, pinnately compounded with four to six pairs of leaflets. A very hardy shrub that will grow in almost any type of soil, it has frequently been used on the great plains of the Northwest as a shelterbelt plant. It is useful as a hedge or an accent plant, especially in dry, sandy situations.

VARIETIES—

C. a. lorbergi—Lorberg Siberian Peashrub.
The foliage is a very fine texture. It is an oddity that should be used with caution.

C. a. pendula—Weeping Siberian Peashrub.
This is a weeping form which is usually grafted high on the species.

Chaenomeles japonica (*Cydonia maulei*)

3-4 ft. Zones 1, 2, 3, 4 JAPANESE FLOWERINGQUINCE

FLOWERS—Bright brick-red, applelike flowers that appear in early May before the leaves. The branches may be brought indoors early in the spring and forced.

This plant is a broad-spreading shrub with many branches forming a dense thicket. The foliage is a good green color. The flowering quince will grow in any average well-drained soil and tolerates some shade. Sunlight is preferred, however, for good flowering effects. It is valued for its early flowers and low growth. It is useful in borders, as a foundation plant, and as a tall ground cover.

VARIETIES:

C. j. alpina—Alpine Japanese Floweringquince.
A dwarf strain with procumbent stems, it seldom grows over 1 foot high. It is a good plant to use under taller shrubs which have naked lower branches.

Chaenomeles lagenaria (*Cydonia japonica*)

8 ft. Zones 1, 2, 3, 4 COMMON FLOWERINGQUINCE

FLOWERS—Reddish-pink, applelike flowers appear in early spring just before or with the leaves. Branches brought indoors after Christmas will force into flower.

This floweringquince is a broad-spreading shrub with



Fig. 6. The applelike blossoms of the Common Floweringquince make this shrub conspicuous in early spring.



Fig. 7. The yellow flowers and the inflated, bladderlike fruits of the Common Bladdersenna may be seen at the same time.

many thorny branches and dark, glossy green leaves. The new leaves are reddish-bronze when they first appear in the spring. The fruit is a hard, sour, yellowish-green quince about 2½ inches in diameter. It contains pectin and can be used in making jellies. The quinces can be grown in any average well-drained soil. Valued for their showy, early flowers, they are used as hedges, thickset plantings, in borders, and as specimens. Many varieties are available with either single or double flowers, varying from white to pink to deep red. A few of the best varieties are listed.

VARIETIES—

C.J. "Candicans"—Flowers are creamy-yellow with a pinkish tinge about 1½ inches in diameter.

C.J. "Knap Hill Scarlet"—Flowers are scarlet, about 1½ inches in diameter. It is a low, horizontal-growing type.

C.J. "Marmorata"—Coral flowers are about 1¾ inches in diameter.

C.J. "Nivalis"—White flowers are approximately 1¾ inches in diameter; lower growing than the type.

Colutea arborescens

10-12 ft. Zones 1, 2, 3 COMMON BLADDERSENNA

This vigorous, fast-growing legume with many upright stems and grayish-green, pinnately compound foliage (9 to 13 leaflets) is apt to become loose and straggly with age. The pealike flowers are yellow with red markings and bloom in late May. The inflated pods are greenish, turning bronze-red. The Bladdersenna grows in any average soil but does better in sandy situations. It is used chiefly in borders and naturalistic plantings.

DOGWOODS

Cornus

The Dogwoods comprise a large group of versatile shrubs and trees. Many are native to Michigan, some inhabiting the banks of streams, borders of swamps, and the sand dunes along the Great Lakes. The popular Flowering Dogwood (*C. florida*) and the Pagoda Dogwood (*C. alternifolia*) are found in the borders of woods in the southern part of the state. Of those listed, only the Corneliancherry Dogwood (*C. mas*) and the Siberian Dogwood (*C. alba sibirica*) are not native to Michigan.

Certain Dogwoods are valued for their colorful flowers, some for their autumn foliage effects, some for their showy fruits, and others for the brilliant red stems so colorful against the snow.

Cornus alternifolia

25 ft. Zones 1, 2, 3, 4 PAGODA DOGWOOD

The *C. alternifolia* is the only native dogwood with alternate buds which makes it very easy to distinguish from the more familiar Flowering Dogwood (*C. florida*). It is a small tree with horizontal irregular branches giving a pagoda-like effect. The flowers which appear in May are small, creamy-white and in flat clusters. The dark blue, globular fruit is borne on red stems. It prefers a well-drained soil and partial shade.

Valued chiefly for the interesting branching habit, it is used as a specimen and in woodland margins. The Flowering Dogwood is preferred where it is hardy.

Cornus amomum

8 ft. Zones 1, 2, 3, 4 SILKY DOGWOOD

The gray silky coating on new growth gives the Silky Dogwood its name. It is similar to the Siberian Dogwood (*C. alba sibirica*) but is somewhat larger in habit and less colorful in the winter.

Cornus alba sibirica

8 ft. Zones 1, 2, 3, 4 SIBERIAN DOGWOOD

WINTER TWIGS—Twigs are bright coral-red in the winter. Annual pruning of old dull-colored wood is essential in order to insure good twig color.



Fig. 8. Few shrubs can surpass the flowering qualities of the Flowering Dogwood.



Fig. 9. The red cherrylike fruits of the Corneliancherry Dogwood appear in mid-July. They may be used in making preserves.

This is a broad round-topped shrub that does not sucker and spread as rapidly as the native Red Osier Dogwood (*C. stolonifera*). In addition to being the best red-twigged Dogwood for winter effects, it also has good green foliage which turns reddish in autumn. Flowers are attractive in the spring, and white fruits are showy for a few weeks in the late summer. Although it prefers a moist situation, it does well in any average soil, either in sun or shade.

A variety, the Creamedge Dogwood (*C. a. argenteo-marginata*), has leaves that are bordered with white. It is desirable for special effects and adds considerable interest when planted in the shrubby border.

Cornus florida

25 ft. Zones 1, 2 FLOWERING DOGWOOD

FLOWERS—Appearing early in spring before the leaves, the conspicuous white bracts, four in number, are very attractive. The tiny yellowish-green true flowers are in the center and are not too noticeable.

FOLIAGE—The color is green during the summer. It turns a bright purplish-red in autumn when exposed to sunlight.

The Flowering Dogwood has an interesting horizontal-branching system and may be trained as a single-trunked small tree or as a multi-branched shrub. It prefers a rich, well-drained soil and does better in a partially shaded situation. In addition to the colorful flower bracts and autumnal foliage, it frequently has clusters of red berries.

Probably the most ornamental of our native small trees, the Flowering Dogwood is excellent as a specimen or accent in the garden or naturalized along the edge of woodlands.

VARIETIES—

c.f. rubra—Red Flowering Dogwood.

The flower bracts are deep pink in color and are very attractive.

Cornus mas

15-20 ft. Zones 1, 2, 3, 4 CORNELIANCHERRY DOGWOOD

FLOWERS—The small yellow flowers appear in compact clusters very early in spring before the leaves.

C. mas is a spreading round-topped shrub with dense foliage. The fruits, which appear in mid-July, are red berries about 1/2 inch long, partially hidden by the foliage. The shrub prefers a moderately fertile, well-drained soil in sun or partial shade. Valued for the early flowers, it is useful in shrubby borders, woodland margins or as a specimen.

***Cornus racemosa* (*C. paniculata*)**

10-15 ft. Zones 1, 2, 3, 4 GRAY DOGWOOD

FLOWERS—Clusters of creamy-white flowers in mid-June.

FOLIAGE—Purplish-red foliage in autumn.

FRUIT—White berries on bright red fruit stalks.

This erect-growing shrub tends to spread out into a wide clump by suckering roots. When the suckering habit is restricted, it forms a very good, well-foliated shrub. It grows well in any moist soil and is best used in large masses for borders and for erosion control plantings.

Cornus stolonifera

8 ft. Zones 1, 2, 3, 4 RED OSIER DOGWOOD

WINTER TWIGS—Twigs are brilliant red in the winter.

Since the new wood is more vivid in color, it is desirable to remove old dull-colored wood in early spring.

The stoloniferous root system of this broad-spreading shrub makes it a good choice for erosion control plantings. The foliage turns red to bronze-purple in autumn. The white flowers appear in clusters in late May, followed by white globose fruits. This shrub prefers moist situations and is used mostly in naturalistic plantings.

The Yellowtwig Red Osier Dogwood (*C.s. flaviramea*) has bright yellow twigs in the winter.

Another native, the Bailey Dogwood (*C. baileyi*) is very similar to the Red Osier Dogwood and is often mistaken for it. The flowers of the Bailey Dogwood, however, bloom intermittently throughout the summer.

***Cotinus coggygria* (*Rhus cotinus*)**

15 ft. Zones 1, 2, 3 COMMON SMOKETREE

FOLIAGE—In autumn the leaves turn various shades of red and yellow.

FRUIT—Billowy masses of pinkish plumelike fruits cover the shrub. Although they turn grayish in late summer, they are most effective through July. Since the Smoketree is partly dioecious (some plants producing only staminate flowers which do not develop the showy, smoky fruit head), it is important to get a fruiting type.

This round-headed shrub generally becomes irregular and picturesque with age. It is a slow grower that is fairly adaptable to dry soils and is valued for the smoky effects of the fruit heads. Use it as a specimen, in groups, or as a tall plant in the shrubby border.

VARIETY—

The Purple Smoketree (*C.s. atropurpurea*) has more showy purplish fruit heads. It is very difficult to locate in nurseries and is not quite as hardy as the species.

COTONEASTERS

Cotoneasters (pronounced ka-tow-nee-aster)

The Cotoneasters comprise a group of plants that range from almost prostrate shrubs good for the rock garden to nearly 20 feet in height. While not primarily considered flowering shrubs, they do have attractive white or pink flowers borne in clusters along the branches. They are chiefly valued for their bright red or black berries and usually glossy foliage. They are lovers of sun and wind and demand full exposure to the elements.

Cotoneaster acutifolia

8 ft. Zones 1, 2, 3, 4 PEKING COTONEASTER

FOLIAGE—The glossy dark-green leaves are the chief attraction.

This erect, round-topped shrub makes an excellent hedge, especially in northern Michigan where it is not bothered by San Jose scale. The hardiest of the Cotoneasters, it grows in even poor soils if well drained. Valued for the good foliage, it is used chiefly as a hedge plant in northern areas where the severe winter weather kills the scale insects. Another closely related species, the Glossy Cotoneaster (*C. joveolata*), grows taller and has foliage that turns bright scarlet to orange in autumn.



Fig. 10. The Common Smoketree has plumelike fruiting panicles which create a smoky appearance in the summer.

Cotoneaster adpressa

2 ft. Zones 1, 2 CREEPING COTONEASTER

FOLIAGE—Dense, small, glossy green leaves with a wavy margin appear early in spring and turn a deep red in autumn.

FRUIT—Attractive bright red berries appear in early autumn.

The branches of this low mound-shaped shrub are closely adpressed to the ground, hence the specific name. It grows well in average well-drained soils. Its fine-textured foliage and its low stature make it useful in low foundation plantings or wherever a low plant is required.

VARIETY—

C. a. praecox, the Early Cotoneaster, is similar to the species but larger and has larger leaves and fruits. This variety is generally offered by nurseries more than the species.

Cotoneaster divaricata

6 ft. Zones 1, 2, 3, 4 SPREADING COTONEASTER

FOLIAGE—Glossy green leaves of fine texture turn deep red in autumn.

FRUIT—Bright red berries cover the branches in September, contrasting against the dark foliage.

The spreading, gracefully arched branches of *C. divaricata* are well foliated, even to the ground. The flowers are pinkish but not conspicuous. This, the most reliable species of the Cotoneasters, grows in any well-drained soil and is useful as a foundation plant, in the border, and even as a specimen.

Cotoneaster horizontalis

2 ft. Zones 1, 2 ROCK COTONEASTER

FOLIAGE—Small, semi-evergreen leaves finally turn red late in the fall. In milder climates, they remain green all winter.

FRUIT—The attractive bright red berries are effective against the green foliage in September and October.

This is a prostrate grower whose branches form flat sprays with side branchlets arranged like a fish bone. It will grow in any well-drained soil in a sunny situation and



is a good low-growing plant valued for the handsome foliage.

Cotoneaster multiflora calocarpa

10 ft. Zones 1, 2, 3 FLOWERING COTONEASTER

FLOWERS—Small white flowers in clusters, borne profusely along the branches, appear in mid-May. They are very attractive but have an unpleasant odor.

This wide-spreading shrub with blue-green foliage will grow in average well-drained soils but needs plenty of room. A handsome plant in flower and fruit, it is useful for masses and borders.

Another species, the Sungari Rockspray (*C. racemiflora soongorica*), is similar to the above species, but it has darker red berries and is hardier.

Deutzia gracilis

3 ft. Zones 1, 2, 3 SLENDER DEUTZIA

FLOWERS—White, bell-shaped flowers in slender upright racemes cover the outer margin of the shrub in late May.

The Slender Deutzia is a low-growing, compact shrub with fine-textured light green foliage. It prefers a well-drained, rather light soil in a sunny situation. The top is likely to be winterkilled and spring pruning and thinning is desirable. It makes a nice low flowering hedge.

Deutzia lemoinei

5 ft. Zones 1, 2, 3 LEMOINE DEUTZIA

FLOWERS—White flowers in upright racemes are produced in great profusion during late May.

This erect-growing round-topped shrub is the hardiest and best of the Deutzias for Michigan. It grows best in any well-drained, light soil and is used in borders and as a flowering hedge.

A variety, *D. l. compacta*, is lower growing and more compact in habit.

Deutzia scabra candidissima

8 ft. Zones 1, 2 SNOWFLAKE DEUTZIA

FLOWERS—Attractive double white flowers appear in late June.



Figs. 11 and 12. The Flowering Cotoneaster is one of the few cotoneasters having both attractive flowers and fruits.



Fig. 13. In late May, the Lemoine Deutzia is covered with clusters of white flowers.

This is a round-headed shrub with rough, pubescent leaves. The twigs are hollow and winterkill badly in Michigan, requiring annual removal of dead wood. This shrub has only the handsome flowers to warrant its use. It prefers a well-drained light soil.

Another very popular variety, *D. s. Pride of Rochester*, has double white flowers tinted pink on the outside.

Elaeagnus angustifolia

20 ft. Zones 1, 2, 3, 4 RUSSIAN OLIVE

FOLIAGE—The dull, gray-green narrow leaves about 3 inches long are covered with silvery scales which make the foliage very attractive.

This low-branching shrub has an irregular outline that becomes treelike and distorted with age. The small, yellowish flowers are covered with silvery scales and are very fragrant in early June. The fruit is a yellow, oblong, olive-like, dry drupe that is also covered with silvery scales. It is extremely hardy, adaptable to light soils and exposed situations.

The handsome silvery foliage makes the Russian Olive useful as a specimen or as an accent plant in border plantings. It has been used in shelterbelt plantings in the Great Plains.

Elaeagnus umbellata

12 ft. Zones 1, 2, 3, 4 AUTUMN ELAEAGNUS

The foliage of the Autumn Elaeagnus is also covered with silvery scales. It is effective when young but is not as spectacular as the Russian Olive (*E. angustifolia*). Growing to a height of about 12 feet, it is widespread

and somewhat open in character. The dull yellow flowers are fragrant in mid-May but are concealed by foliage. In autumn, the silvery-brown berries turn reddish and add another bit of color. They are juicy and sour; when ripe, they attract the birds. The plant is very tolerant of dry situations and is used for color accent and contrast in the border.

EUONYMUS

***Euonymus* (pronounced you-on'-ee-mus)**

A most useful group of plants. Some are evergreen vines (see Ornamental Vines for Michigan, Bulletin #C-3), some are dense shrubs, some are treelike, and some have conspicuous corky bark. The flowers are usually greenish and have no ornamental value, but the fruiting qualities of some species are very effective. The foliage of most species turns shades of red or purple in the fall. The group is quite tolerant of growing conditions.

Euonymus alatus

8-10 ft. Zones 1, 2, 3, 4? WINGED EUONYMUS

WINTER TWIGS—The twigs have two or four prominent corky wings which are interesting during the winter months.

FOLIAGE—The early-appearing leaves are a good rich green color during the summer and turn purplish-red in autumn.

The Winged Euonymus is an erect shrub with a regular outline. Its horizontal branching habit tends to make it broader than high. The greenish flowers are inconspicuous, and the scarlet fruits are mostly hidden by the foliage. It grows in any well-drained soil. This is a good shrub at all seasons but is especially striking in the fall when the foliage colors. It is useful as a specimen, in borders, and as a hedge.



Fig. 14. The silver-gray foliage of the Russian Olive contrasts nicely against other green foliage.



Fig. 15. The corky bark of the Winged Euonymus is especially conspicuous in the winter.

VARIETIES—

The Dwarf Winged Euonymus, (*E. a. compacta*) attains a height of 5 feet. The fall foliage is a more brilliant red, but the corky wings are usually less prominent.

Euonymus europæus

20 ft. Zones 1, 2, 3, 4 EUROPEAN EUONYMUS (*E. Burningbush*)

FOLIAGE—Dark green leaves turn reddish-purple in autumn.

FRUIT—Rose-colored capsules split open, revealing orange seeds; very effective in early fall. This is the best Euonymus for fruiting effects.

This is a large shrub or small tree of good repute which grows well in sun or partial shade and is tolerant of most soils. It is used as a specimen, in masses, in borders, and as a hedge.

VARIETIES—

E. e. aldenhamensis and *E. e. atropurpureus* have bright red fruits and, if obtainable, should be used in preference to the species.

Euonymus americanus, The Brook Euonymus, and *E. atropurpureus*, the Eastern Wahoo, are native to lower Michigan but are less ornamental than the colorful European Euonymus.

Another native, *E. obovatus*, the Running Euonymus, is a trailing shrub less than 1 foot high. It makes an attractive ground cover in shady areas.

Euonymus kiautschovicus (E. patens)

4-6 ft. Zones 1, 2 SPREADING EUONYMUS

FOLIAGE—Nearly evergreen foliage, 2 to 3 inches long, resembles the common Wintercreepers (*E. fortunei* var.). It can, however, easily be distinguished from the Wintercreepers as it flowers much later (in August and September), and the foliage does not remain green all winter.

This is a spreading shrub with the lower branches sometimes prostrate and rooting. It grows in any average soil

in sun or partial shade. In a milder climate, it holds its foliage longer and produces colorful pinkish fruits. The nearly evergreen foliage makes it useful in foundation plantings, as a hedge, in shrubbery borders, and as a tall-growing ground cover. It will tolerate a considerable amount of shearing.

FORSYTHIAS

Forsythia

The cheerful, attractive yellow flowers of the forsythias in early spring make them welcome in any garden. Branches brought indoors during the late winter will force into bloom. They are free from diseases and insect pests and grow well in most soils, even withstanding the usually poor soils found on city properties. While they are hardy in most sections of Michigan, the flower buds may sometimes be killed by winter freezes. The Early Forsythia (*F. ovata*) is the hardiest and has bloomed in areas where the other species were injured.

Forsythia intermedia

9 ft. Zones 1, 2, 3 BORDER FORSYTHIA

FLOWERS—Rich yellow, bell-like flowers cover the entire shrub in mid-April.

This old garden favorite is an erect shrub with secondary arching branches that droop to the ground. The dense foliage is a good green color all summer. It will grow in any average soil but not in wet areas. It is useful in numerous ways: as flowering accents, in borders, and as screens.

VARIETIES—

F. i. spectabilis, the Showy Border Forsythia, has deep yellow flowers that are larger than the species. It is an old favorite in the garden.

F. i. primulina, the Primrose B. F., has pale yellow flowers.

F. i. Spring Glory, a recent introduction, has deep yellow flowers produced in great profusion.



Fig. 16. The brilliant pink, bitterweevil-like fruits of the European Burningbush Euonymus persist after the leaves drop.



Fig. 17. No color is more welcome in spring than the bright gold of the Forsythias.

F. i. Lynwood Gold is another new variety that has deep golden yellow flowers, also in great profusion.

The last two varieties have proved very satisfactory in East Lansing.

Forsythia ovata

8 ft. Zones 1, 2, 3, 4 EARLY FORSYTHIA

FLOWERS—Amber-yellow, bell-like flowers appear in early April. They are small and not as abundant as the Border Forsythia but appear about 10 days earlier.

This native of Northern Korea is a compact, dense plant with good summer foliage. It is the hardiest of the Forsythias, and should be used in place of the less hardy sorts in our northern gardens.

Forsythia suspensa

8-10 ft. Zones 1, 2, 3, 4? WEEPING FORSYTHIA

FLOWERS—Bright yellow, bell-shaped flowers appear in mid-April.

This is a dense shrub whose slender, weeping branches make a sprawling, tangled mass. Although it is easy to

grow in almost any type of soil, it is not as desirable as the Border Forsythia in refined plantings because of the tangled growth. It is suitable for planting on banks for erosion control, as nesting sites for wildlife, or where its pendulous habit of growth is advantageous.

VARIETIES—

F. s. fortunei, the Fortune W. F., is more erect in habit of growth.

F. s. sieboldi, the Siebold W. F., has deeper yellow flowers which appear later and are more profuse. Its very slender branches often trail on the ground and root at the tips.

Hamamelis vernalis

6-8 ft. Zones 1, 2, 3 VERNAL WITCHHAZEL

FLOWERS—Light yellow, ribbonlike, fragrant flowers appear in February or early March. They open and close with weather changes and are effective in bloom for several weeks.

This erect shrub has dense, rather coarse foliage which turns yellow in autumn. The fruit is a grayish, woody capsule that, when ripe, ejects its seeds into the air with considerable force. It is fairly tolerant as to soils but is not as desirable in shady areas as the native witchhazel (*H. virginiana*). Because of the interesting, very early flowers, the yellow autumn foliage and the good habit of growth, this shrub is very desirable in ornamental plantings.

VARIETIES—

H. v. carnea, the Redpetal Vernal Witchhazel, has red flower petals.

H. v. tomentella, the Woolyleaf V. W., has leaves that are wooly and whitish on the underside and only grows to about 6 feet high.

Hamamelis virginiana

15 ft. Zones 1, 2, 3, 4 COMMON WITCHHAZEL

FLOWERS—The yellow flowers appear in October, even



Fig. 18. Witchhazels: first to bloom in the spring (*Hamamelis vernalis*) and last to bloom in the fall (*Hamamelis virginiana*).

after the leaves have fallen. The petals are narrow crinkly ribbons, four in number, that open and close as the weather changes.

This native species, a compact, well-foliated shrub in youth, becomes irregular and picturesque with age. The leaves are coarse, good green in summer, turning golden-yellow in autumn. The fruit is a woody capsule that ejects its seeds when ripe. Although it is tolerant of average soils, it grows best in sandy or gravelly soils with a fair amount of moisture in a partially shaded situation. Use it in naturalistic plantings, as a background shrub or in large-scale plantings.

The branches, bark and leaves are distilled and used in the preparation of Witchhazel extract.

Hibiscus syriacus

12 ft. Zones 1, 2, 3? SHRUBALTHEA (Rose of Sharon)

FLOWERS—The hollyhocklike flowers, 2 to 4 inches in diameter, appear late in the season (August and September) at a time when few other shrubs are in bloom. There are many varieties available, single or double; and colors range from white through the reds, purple and blue.

This erect, treelike shrub has a regular coarse-branching system. The foliage is a good dark green but, unfortunately, appears late in the spring and the leaves droop badly during prolonged periods of drought. It prefers a soil with a fair amount of moisture in a sheltered situation. Valued for the late colorful flowers, these shrubs are useful as specimens, hedges and background plants in borders. Consult a nursery list for flower colors.

Hydrangea arborescens grandiflora

3-4 ft. Zones 1, 2, 3 SNOWHILL HYDRANGEA (Hills-of-Snow)

FLOWERS—Large clusters of sterile, white flowers appear



Fig. 19. The large colorful flowers of the Shrubalthea appear in late summer and fall.



Fig. 20. The Snowhill Hydrangea makes an excellent low plant for shady locations.

in early July. They are greenish at first, then turn white and finally tan, remaining on the stalks long after the leaves drop in the fall.

The branches of this low, many-stalked shrub tend to winterkill in Michigan, therefore prune it to the ground early in the spring. Also, the flower clusters are likely to be quite small unless it has been severely pruned each spring. The leaves are large and bright green, having no autumn coloration. The shrub requires a moist, fertile soil, growing equally well in sun or shade. Because of its growth character, it is most effective when used among perennials.

Hydrangea paniculata grandiflora

15-20 ft. Zones 1, 2, 3 PEEGEE HYDRANGEA

FLOWERS—Erect, large panicles of sterile flowers appear in August. At first they are white, then pink and, finally, a dull rose. The brownish dried heads remain on the stalks long after the leaves have fallen.

This large, stiff and irregular shrub or tree grows 15 feet or more where it is fully hardy. In Michigan, however, it winterkills occasionally and seldom attains full size. Annual removal of weak and old wood is desirable for good form and best flowering effects. Since the flowers are produced on the current season's wood, it may be cut to the ground each spring and have good flowers that season.

The foliage is a bright green and is coarse in texture. This shrub will grow in any average soil but thrives in a moist, fertile soil. Plant it in sun or partial shade. Valued for the conspicuous flowers in late summer, it is used as an accent plant or as a specimen.

Hydrangea quercifolia

4 ft. Zones 1, 2, 3 OAKLEAF HYDRANGEA

FLOWERS—Panicles of numerous sterile flowers appear in early July. They are 6 to 10 inches long, white, and turn rose-purple at maturity. They are not as conspicuous in flower as the other Hydrangeas.

FOLIAGE—Leaves resemble those of the Red Oak but are whitish and wooly underneath. In autumn, they turn various shades of red.

This is a coarse, irregular shrub grown in Michigan



Fig. 21. From green to white to pink and, finally, a dull rose are the flowers of the Paegee Hydrangea.

chiefly for its interesting foliage. It prefers a rich, moist soil and a sheltered situation. Because of the odd foliage, it is difficult to combine with other plants and is best when used as a specimen.

Hypericum proflificum

3 ft. Zones 1, 2, 3 SHRUBBY ST. JOHN SWORT

FLOWERS—Bright yellow flowers appear in late July and continue for several weeks. About 1 inch in diameter, each flower has five petals and numerous showy stamens.

A small, compact shrub, it is well clothed with small, narrow leaves that remain green late in the season. Native to Michigan, it is better to plant it in partial shade as the flowers fade rapidly in full sun. It adapts itself admirably to cultivation in domesticated gardens and is valued for the yellow flowers in midsummer when other shrubs appear rather drab.

Another species, the Golden St. Johnswort, *H. frondosum*, has larger, showier flowers, 2 inches in diameter, but is less hardy than the above species.

HOLLIES

Illex

A highly ornamental group of shrubs, the hollies are valued for their evergreen foliage and colorful red fruits. Unfortunately, the most colorful species, *Illex cornuta* (the Chinese Holly) and *Illex aquifolium* (the English Holly) are not hardy in Michigan. The American Holly (*I. opaca*) and Japanese Hollies (*I. crenata* sp.) have been grown in lower Michigan with fair success when planted in protected situations. The native species, *I. glabra*, valued for its evergreen foliage, and *I. verticillata*, valued for the bright red berries, are hardy in most of Michigan and make good ornamental plants.

It should be noted that the hollies are dioecious; i.e., the staminate or male flowers are produced on one plant and the pistillate or female flowers (fruit bearing) on another. Both plants must be near enough to insure pollination of the pistillate flowers for production of the fruits. This, however, is not important when using the black fruiting sorts like *I. crenata* and *I. glabra*.

Illex crenata bullata (I. c. convexa)

4-6 ft. Zones 1, 2 CONVEXLEAF JAPANESE HOLLY

FOLIAGE—Evergreen leaves about 1 inch long that are spoonshaped, convex above, concave beneath, and attractive at all seasons.

This is a dense, compact shrub, twice as broad as it is high. The small black berries (on the pistillate plants) are not ornamental. It prefers a light, moist, slightly acid soil in a cool, partially shady situation. It is the hardiest of the Japanese Hollies and is a good foliage plant for hedges, specimen and foundation plantings.

Another variety, *I. c. helleri* (the Heller J. H.), is a dwarf shrub about 3 feet high but not so hardy as the above species.

Illex glabra

6-8 ft. Zones 1, 2, 3, 4 INKBERRY

FOLIAGE—Dark, lustrous evergreen leaves about 2 inches long. In the winter they turn very dark and are stiff, rattling with a wind.

Although this upright-growing, much-branched shrub can be kept dense by pruning, by nature it is likely to be straggly and open, particularly at the base. The fruits are black, inconspicuous berries borne only on the pistillate plants. It grows in moist, rather sandy, slightly acid soil in sun or partial shade. It is useful as a filler plant in evergreen shrub plantings.

Illex opaca

20 ft. Zones 1, 2 AMERICAN HOLLY

FOLIAGE—Spiny toothed, dark green foliage is used for Christmas decorations. It is not as lustrous as that of the English Holly, *I. aquifolium*.

FRUIT—Bright red berries a quarter of an inch in diameter, are effective in fall and early winter. They are produced only on the female plants.

This is a dense, well-foliated, narrow, shrubby tree in youth, becoming an open, irregular tree with age. Where it is native in the eastern United States, it will grow to 40 feet high. In Michigan, however, it seldom grows over 20 feet high. It grows best in a light, rich, moist soil that is slightly acid and where it is protected from winter sun and winds. It is valued for its colorful foliage and fruits and is useful as an accent plant or specimen.



Fig. 22. The leaves of the exotic Oakleaf Hydrangea resemble those of the Red Oak.

Ilex verticillata

8 ft. Zones 1, 2, 3, 4 COMMON WINTERBERRY (Michigan Holly)

FRUIT—Bright red berries appear in the early fall and hang on the branches after the leaves drop, even until January (only on pistillate plants).

This upright-growing shrub has bright green foliage during the summer which turns black or brown after a frost. A native shrub that inhabits swamps and wet woodlands, it grows best in a cool, rich, moist soil and in a shady situation. The Michigan Holly, valued for its attractive red berries, is best when used in naturalistic plantings.

Another closely related species, *I. laevigata* (the Smooth Winterberry), sometimes produces fruit without pollination.

Kerria japonica

4 ft. Zones 1, 2, 3 JAPANESE KERRIA

FLOWERS—Bright orange-yellow flowers appear in late May.

WINTER TWIGS—Twigs are bright green and very attractive during the winter. The tips of the branches winterkill so the annual removal of old and dead twigs is essential to insure vigorous green branches.

A broad, round-topped shrub with many small branches, the foliage is a bright green, turning yellowish in autumn. It grows in any average soil in sun or shade. The flower color, however, is better in a partially shaded situation. Use it as a foreground shrub in border plantings.

VARIETIES—

K. j. pleniflora, the Double Japanese Kerria, has double flowers, grows taller, and is more leggy. *K. j. picta*, the Whiteedge Japanese Kerria, has green leaves that are edged with white. It is more dwarf in habit.

Kolkwitzia amabilis

8 ft. Zones 1, 2, 3, 4 BEAUTYBUSH

FLOWERS—Pink elongated balloonlike buds that fade to light pink when open. They are lipped like small snapdragons and have golden throats. They are very attractive in early June.



Fig. 23. The Beautybush is covered with small pinkish flowers in late May.

This native of China is an upright-growing, arching shrub that requires plenty of room for proper display. The foliage is a grayish-green that turns a yellowish-tan in autumn. The fruits are dry capsules that are covered with bristly tufts which are brownish and attractive for a period after the flowers drop. It grows in any average light soil and flowers best in full sunlight. It is used as a specimen, in groups, and in border plantings.

Laburnum alpinum

20 ft. Zones 1, 2, 3? SCOTCH LABURNUM

FLOWERS—Bright yellow, pea-like flowers in pendulous clusters are very showy in late May.

This is an erect-growing treelike shrub, usually having several main trunks. The side branches also are ascending, making a broad columnar plant. The foliage is three-parted, cloverlike, and a grayish-green in color. The fruits are pea-like but not ornamental. The seeds are very poisonous. A legume that grows well in any well-drained soil, it is best when used as a specimen or as an accent plant where the flowers are visible over the tops of the lower shrubs.

VARIETIES—

L. a. autumnale, the Autumn Scotch Laburnum, blooms again in the autumn.

L. a. pedunculatum, the Weeping Scotch Laburnum, has drooping pendulous branches.

Another species, *Laburnum angyroides* (the Golden-chain Laburnum), is similar to the Scotch Laburnum but less hardy. A hybrid, *Laburnum watereri* (*L. alpinum* x *L. angyroides*), is also available but neither of these is as desirable for Michigan as the harder Scotch Laburnum.

PRIVETS

Ligustrum

A most useful group of shrubs that grow fairly well in even the most adverse situations. It is said that if privets fail to grow in the area it is useless to try any other plant. They have good foliage, and are used more for hedges than any other group of plants. The white flowers of some species are colorful, and the blackish fruits of some are also ornamental. If the plants are sheared during the early summer, few, if any, flowers are produced.

Ligustrum amurense

15 ft. Zones 1, 2, 3, 4 AMUR PRIVET

This erect, much-broadened shrub has clean, lustrous foliage and makes a very good plant. The small spikes of white flowers in mid-June are followed by blue-black, bloomy fruits in late summer. It is a rapid grower that is very tolerant of soil and situation. Since it stands a considerable amount of shearing, it is, perhaps, the best plant for clipped hedges in Michigan. This privet is also good as a screen plant or as a filler in the border.

Ligustrum ibolium

12 ft. Zones 1, 2, 3, 4? IBOLIUM PRIVET

A hybrid resulting from a cross of *Ligustrum obtus-*



Fig. 24. Yellow pealike flowers of the Scotch Laburnum hanging in pendulous racemes attract much attention in late May.

folium and *Ligustrum ovalifolium*, this privet has characteristics of both parents. It has the form and foliage much like the California Privet (*Ligustrum ovalifolium*) and is nearly as hardy as the Border Privet (*Ligustrum obtusifolium*). The Ibolium Privet is a very desirable shrub that may be used as a hedge, as a filler in the border, and as a screen plant.

Ligustrum obtusifolium

9 ft. Zones 1, 2, 3, 4 BORDER PRIVET

This is a wide-spreading shrub with dense foliage to the ground. The leaves are small and deep green in the summer, and turn purplish in the fall. The flowers are white, in short nodding clusters blooming in mid-June, followed by bloomy blue-black berries which persist most of the winter. It is a very versatile plant, useful in many situations. The Iboeta Privet, (*Ligustrum ibota*), one of the least ornamental species, is often mistakenly cultivated for this privet.

VARIETIES—

L. o. regelianum, The Regels Border Privet is a lower-growing plant, usually not over 4 to 5 feet high, with graceful horizontal branches. It is a good foundation plant in poor situations.

Ligustrum ovalifolium

15 ft. Zone 1 CALIFORNIA PRIVET

An erect, densely-branched shrub with half-evergreen, glossy leaves. Although it is a very popular hedge plant in milder climates, it is not recommended for Michigan because it winterkills to the ground during severe winters. In Michigan, the Amur Privet is preferred.

Ligustrum vulgare

15 ft. Zones 1, 2, 3, 4 COMMON PRIVET

The Common Privet is an upright-branching, irregularly-outlined shrub that has rich green foliage which lasts into late fall. The white flowers appear in mid-June in erect, terminal clusters, followed in late fall by large, lustrous black berries. Like all of the privets, it is very tolerant of growing conditions. Valued for the glossy leaves and fruits, it is used for screens, border plantings, and hedges. In certain areas, the Common Privet is bothered by a blight for which there seems to be no cure.

There are several garden forms available; some are dwarf varieties and some have yellow or variegated foliage.

HONEYSUCKLES

Lonicera

A very popular group of plants, they have colorful flowers and fruits which attract many birds. They are quite easily grown and are not bothered by serious diseases or pests. Professor C. P. Halligan, in his bulletin on "Hardy Shrubs", says of them:

"Honeysuckles—a name full of kindly associations and pleasing remembrances of flowers that saturate the atmosphere with their fragrance and that lure the distant bees and humming birds to their honey-laden blossoms. They are one of the most attractive groups of all the shrubs in their floral display and equally admirable in their second period of beauty, namely, when their brilliant translucent fruits ripen in the summer or fall".

There are a great many species and varieties available in nurseries today, but some very so little from one another that the landscape value of certain ones is questionable. Only the best time-tested ones are listed.

Lonicera bella

10 ft. Zones 1, 2, 3, 4 BELLE HONEYSUCKLE

FLOWERS—White or pinkish flowers fade to yellow before falling; showy in late May.

FRUIT—Red berries, in great abundance during late June and July, are eaten by the birds.

This is a hybrid (*L. morrowi* x *L. tatarica*) which is a compact upright grower in youth but spreads out considerably with age. The dense foliage is slightly bluish-green, appearing early and lasting until late in the season. It is a rapid grower that thrives in any good garden soil in sun or partial shade. It should be considered when a specimen, hedge screen, or large-scale foundation planting is desired.

VARIETIES—

L. b. albida, the White Belle Honeysuckle, has white flowers.

L. b. atrorosea, the Pink Belle Honeysuckle, has deeper pink flowers.

Lonicera fragrantissima

6-8 ft. Zones 1, 2, 3, 4 WINTER HONEYSUCKLE

FLOWERS—Small, very fragrant, creamy-white flowers

appear in late March or early April before the foliage.

FLIAGE—Stiff, leathery, dark green, nearly evergreen leaves last well into winter.

This very desirable, round-headed shrub bears foliage to the ground. The red fruits appear in early summer but are hidden by the foliage. It will grow in any good garden soil in either sun or partial shade. Since it has the best foliage of the honeysuckles, it is useful as hedges, in borders, and in foundation plantings.

Lonicera korolkowi

12 ft. Zones 1, 2, 3, 4 BLUELEAF HONEYSUCKLE

FLOWERS—Numerous rose-pink flowers are very showy in late May.

FRUIT—Bright red berries appear in July and August.

FLIAGE—Bluish-green to grayish-green leaves are densely hairy on the underside, especially when they first appear.

This is a wide-spreading, irregularly-outlined shrub with slender arching branches. It grows well in any good garden soil and prefers a sunny, open situation. Valued chiefly for the interesting bluish-green foliage, it is useful for color accent in border plantings, as a specimen, and in masses.

VARIETIES—

L. k. floribunda, the Broad Blueleaf Honeysuckle, has larger leaves and is superior to the species.

L. k. zabeli, the Zabel Blueleaf Honeysuckle, has brighter flowers and foliage that is more glabrous.

Lonicera maackii

15 ft. Zones 1, 2, 3, 4 AMUR HONEYSUCKLE

FLOWERS—White, fragrant flowers in axillary pairs are very attractive in late May; it is the last of the shrub honeysuckles to bloom.

FRUIT—Showy red berries in groups of four appear in late September and October.

L. maackii is a large, round-headed shrub that becomes



Fig. 25. The honeysuckles are profuse bloomers: the last to flower is the Amur Honeysuckle.



Fig. 26. Birds like to eat the juicy berries of the honeysuckles.

quite open at the base with age. The foliage is bright green and hangs on late in the fall. The hardiest of the honeysuckles, it grows well in any average garden soil in either sun or partial shade. It is used as a tall background shrub in the border plantings, in masses, and as specimens.

VARIETIES—

L. m. erubescens has larger flowers flushed with pink.

L. m. podocarpa is more spreading than the species; it has darker green leaves that are retained longer in the fall.

Lonicera morrowii

6 ft. Zones 1, 2, 3, 4 MORROW HONEYSUCKLE

FLOWERS—Flowers appear in late May; originally white, they then fade to yellow.

FRUIT—Bright red berries in great abundance cover the shrub in July.

This dense, very widespreading shrub sometimes grows twice as broad as it is high. The foliage is grayish-green and slightly hairy. It grows in any average garden soil in sun or partial shade. It is a good moundtype plant, useful as a low screen, in borders, and in masses.

VARIETIES—

L. m. xanthocarpa has fruits that are yellow.

Lonicera tatarica

12 ft. Zones 1, 2, 3, 4 TATARIAN HONEYSUCKLE

FLOWERS—Pink or white flowers that do not fade to yellow are profusely produced in late May.

FRUIT—Jewel-like red berries are also produced in great abundance in July. Very showy; eaten by the birds.

The most popular species of the honeysuckles, the Tatarian Honeysuckle has been grown in American gardens for many years. It is a broad-spreading, round-topped shrub with handsome foliage. A rapid grower, it adjusts to almost any average soil and situation in sun or partial shade. It is a very reliable shrub, excellent at all seasons, and can be used as a specimen, for screens, in masses, and in the shrubby border.

VARIETIES—

- L. t. alba* has pure white flowers.
- L. t. grandiflora* has larger flowers.
- L. t. lutea* has yellow fruits.
- L. t. siberica* has deep pink flowers.

Magnolia soulangeana

25 ft. Zones 1, 2 SAUCER MAGNOLIA

FLOWERS—Large, 5 to 10 inches in diameter, cup-shaped, white to rosy-purple flowers bloom in early May, appearing before the leaves.

A hybrid (*denudata* x *M. liliiflora*) that is a low-spreading, shrubby tree with coarse-textured, dense foliage. The bark is a light gray and very interesting in the winter. It prefers a rich, moist, well-drained soil and a sunny, open but protected situation. Magnolias have fleshy roots and should be transplanted, balled and burlapped in the spring. The Saucer Magnolia, available in several varieties, is valued for the early, showy flowers and used chiefly as a specimen.

VARIETIES—

- M. s. lennei*—flowers white inside and rosy-purple outside.
- M. s. nigra*—flowers white inside and rich purple outside.

Another similar Magnolia (*M. liliiflora nigra*) has flowers that are light purple inside and dark purple outside.



Fig. 27. Few shrubs have more colorful flowers than the Saucer Magnolia.



Fig. 28. Glossy hollylike leaves that are nearly evergreen and the glaucous bluish grapelike fruits of the Oregon grape are very attractive in late summer. Grow it in a protected, partially shaded situation for best results.

Magnolia stellata

10-12 ft. Zones 1, 2, 3 Star Magnolia

FLOWERS—White, fragrant, starlike (12 to 18 petals) flowers bloom in late April, appearing before the leaves.

First of the Magnolias to bloom, this native of Japan is a broad-spreading, densely foliated, treelike shrub. Although the leaves are large, it has the finest-textured foliage of the Magnolias. It prefers a rich, fairly moist, well-drained soil and a sunny, open but sheltered situation because the flowers are damaged by wind, rain, and frost. This handsome plant, hardiest of the Magnolias, makes an excellent small specimen tree.

VARIETIES—

- M. s. rosea*—flower petals a delicate pink.

Mahonia aquifolium

3 ft. Zones 1, 2 OREGONGRAPE (Hollygrape)

FOLIAGE—Hollylike, lustrous dark green leaves are nearly evergreen. The young leaves are first bronzy-red, then glossy green during the summer and, finally, purplish in the fall and winter.

FLOWERS—Erect clusters of bright yellow flowers appear in early May.

FRUITS—Clusters of glaucous blue-black grapelike fruits in September.

This semi-evergreen, low, dense shrub holds its foliage during the winter unless exposed to winter sun which turns it brown. The flowers and fruits are fairly attractive. It grows in any average soil but requires a situation protected from the winter sun. A handsome plant, it is useful in masses, in borders, and as a foundation plant in semi-shaded areas.

MOCKORANGES

Philadelphus

In early days this group was called the *Syringa*, which is the botanical name for the lilacs. It is chiefly valued for the very fragrant white flowers that appear in June after most of the ornamental shrubs are through blooming. Foliage is average, not turning bright colors in the fall, and fruits are not ornamental. These are, however, vigorous shrubs that grow well in most soils, requiring only a minimum amount of care. Some occasional pruning is desirable for neat appearance.

A great many species and varieties are available. Victor Lemoine, the great French hybridizer, did much to improve the mockoranges and was responsible for the introduction of many of the better sorts.

Philadelphus coronarius

10 ft. Zones 1, 2, 3, 4 SWEET MOCKORANGE

FLOWERS—Fragrant, single, creamy-white with yellow stamens, are in axillary racemes and are very showy in early June.

An erect shrub, its stiff, upright branches arch almost to the ground with age. The foliage is dense and maintains a good green color during the summer. Although it grows well in almost any soil, it prefers a light fertile soil; it stands some shade but flowers best in full sun. An oldtime favorite in American gardens, it is useful as a specimen in borders and masses.

Philadelphus lemoinei

4-6 ft. Zones 1, 2, 3, 4 LEMOINE MOCKORANGE

FLOWERS—Fragrant, single white flowers are produced in great profusion; it blooms later in June and over a longer period than *P. coronarius*.



Fig. 29. In mid-June the Virginal Mockorange is covered with fragrant white flowers.



Fig. 30. The fruits of the Common Ninebark are reddish in July.

This hybrid (*P. coronarius* x *P. microphyllus*) was originated by Victor Lemoine. It is a compact, rounded shrub densely clothed by medium fine-textured foliage. It does well in any average soil and is valued for its showy flowers. It is useful as hedges, masses, and specimens. There are a great many excellent varieties available. A few of the best ones are listed.

VARIETIES—

"*Avalanche*"—single fragrant flowers 1 inch in diameter; it is 4 feet high with arching branches.

"*Boule d'Argent*"—double flowers 2 inches in diameter; it is 6 feet high and very free flowering.

"*Mont Blanc*"—single flowers 1½ inches in diameter; it is 4 feet high and very hardy.

"*Innocence*"—single flowers 1½ inches in diameter; it is 6 feet high and very fragrant.

Philadelphus virginalis

10 ft. Zones 1, 2, 3, 4 VIRGINAL MOCKORANGE

FLOWERS—Large fragrant, semi-double white flowers appear in mid-June.

The Virginal Mockorange is an erect, rounded shrub which does well in any average soil. It is a hybrid of *P. lemoinei* x *P. nivalis plenus* and is prized for its fragrant white flowers. Since it tends to lose many of its lower branches and become leggy with age, it is most useful as a background shrub in the border planting.

VARIETIES—

"*Bouquet Blanc*"—single flowers are 2 inches in diameter. It grows 4 feet high.

"*Glacier*"—double flowers are 1 inch in diameter. It is 5 feet high and very showy in flower.

"*Virginal*"—double flowers are 2 inches in dia-

meter. Grows 10 feet high and is very fragrant. The most popular of the double flowering sorts.

Physocarpus opulifolius

10 ft. Zones 1, 2, 3, 4 COMMON NINEBARK

The Common Ninebark is mostly used in naturalistic plantings around ponds, along streams, and in other areas where the soil is moist. In habit of growth it is a wide-spreading, round-topped shrub with coarse, dense foliage. In the winter, the bark peels off the stem in strips, giving the shrub a ragged appearance. In early June, it is covered with clusters of small pinkish blossoms. Later small inflated fruit capsules are red for a few weeks in July, then turn brown. It grows well in sun or shade, but the fruit capsules are less colorful in shady situations.

VARIETIES—

P. o. aureus, the Goldenleaf Common Ninebark, has bright yellow leaves when planted in the sun.



Fig. 31. The pink flowers of the Doublepink Almond Cherry appear early in the spring.

P. o. nanus, the Dwarf Common Ninebark, has smaller leaves and grows about 4 feet tall; it is an excellent plant for neat clipped hedges.

Another ninebark, *P. monogynus*, a small-leaved species with a compact habit of growth, is also a good plant for low clipped hedges.

Prunus cistena

8 ft. Zones 1, 2, 3, 4 PURPLELEAF SAND CHERRY

FOLIAGE—Reddish-purple leaves retain their color from early spring until fall.

This Sand Cherry is a hybrid (*P. pumila* x *P. cerasifera atropurpurea*) which is more tree-like than shrubby since it has a single trunk. The small white or light purple flowers and the fruit, a dark purplish cherry, have little ornamental value because they blend with the foliage. It grows in any well-drained soil but must be planted in full sun for the best foliage coloration. The highly colored foliage makes it valuable for a specimen or for color contrast in border plantings.

Another purpleleaf kind is the Pissard Myrobalan Plum (*Prunus cerasifera atropurpurea*) which is more tree-like in character, growing to 25 feet high.

Prunus glandulosa sinensis

4 ft. Zones 1, 2, 3, 4 DOUBLEPINK ALMOND CHERRY

FLOWERS—Double pink flowers are in great profusion all along the branches in early May before the leaves appear.

This small, round-topped, graceful shrub with narrow, bright green leaves grows in any fertile, well-drained soil. A very popular little shrub, it is valued for its floral display in early spring. It is, unfortunately, bothered by borers and is usually short-lived; however, it is useful as a specimen and as a low shrub in the border.

Another variety, *P. g. alboplena* (the Doublewhite Almond Cherry), has double white flowers.

Prunus maritima

6 ft. Zones 1, 2, 3, 4 BEACH PLUM

FLOWERS—White, single flowers appear in early May, before the leaves.

The Beach Plum, a rounded, dense shrub with wide-spreading branches, tends to become open and straggly with age. The fruit, a dull purplish plum about three-quarters of an inch in diameter, is edible and makes a delicious plum jam. Several varieties, "Eastham," "Hancock" and "Premier," have larger fruits. The Beach Plum grows in any light, well-drained soil in sun or partial shade and is useful in masses and in the shrubbery border.

Prunus tomentosa

10 ft. Zones 1, 2, 3, 4 MANCHU CHERRY (Nanking Cherry)



Fig. 32. The first of the *Prunus* family to bloom in the spring is the Manchou Cherry.



Fig. 33. A popular shrub is the Double Flowering Plum. The pink flowers are effective for nearly 2 weeks.

FLOWERS—White (pinkish in bud), single flowers are in great profusion during late April. It is the first of the *Prunus* to bloom.

FRUIT—Bright red cherries, a half inch in diameter, appear during June and July. They are sour, juicy, and edible.

This broad-spreading, round-topped shrub or squat tree is of great ornamental value. The foliage, a deep green color and densely hairy beneath, is excellent all season. It grows well in any fertile, well-drained soil. Good in flower, fruit, and foliage, this worthwhile shrub is useful as a specimen, in borders, in masses, and in large-scale foundation plantings.

Prunus triloba multiplex

10 ft. Zones 1, 2, 3, 4 **DOUBLE FLOWERING PLUM**

FLOWERS—Large, double, pink flowers are freely produced all along the branches in late April before the leaves appear.

This is a round-topped, spreading shrub with deep green leaves that are usually three-lobed. A grafted form, it usually suckers below the graft, often choking out the desirable double flowering form; therefore, care should be taken to remove the suckers. It grows in any fertile, well-drained soil in sun or partial shade. It is not as hardy as other *Prunus* and is bothered considerably by borers. It is, nevertheless, a very spectacular flowering plant, useful as a specimen and in shrub borders.

An erect form that is grafted on an upright standard is also available.

Pyracantha coccinea lalandi

6 ft. Zones 1, 2, 3? **LALAND FIRETHORN**

FRUITS—Bright orange-red berries one-fourth inch in diameter, appear in clusters all along the branches.

They are effective from September well into the winter.

This is a vigorous growing, wide-spreading, dense shrub with an irregular outline. The leaves are glossy, dark and nearly evergreen when protected from the winter sun. If exposed to sunlight, they turn bronzy-brown and drop off before spring. The flowers are white, in clusters, and quite attractive in early June.

It prefers a well-drained fertile soil and a protected situation. Valued for the excellent fruits and glossy foliage, it is useful as a foundation shrub, as a specimen, in masses, and espaliered against walls.

Rhamnus cathartica

12-18 ft. Zones 1, 2, 3, 4 **COMMON BUCKTHORN**

This large stiff shrub, irregular in outline, has spiny branches covered with dense, deep green foliage which retains its color late in the season. The inconspicuous flowers are small and greenish in color and the juicy black fruits are attractive to the birds. The buckthorn is a rapid grower and is adaptable to almost any type of soil and situation. It was formerly widely used for clipped hedges; today it is used more for large border plantings and in naturalistic areas. It has escaped from cultivation and is now naturalized in much of Michigan.

Rhamnus frangula

12 ft. Zones 1, 2, 3, 4 **GLOSSY BUCKTHORN**

This plant received its common name from its glossy foliage. It is an erect-growing, well-formed, dense shrub, much more ornamental than the Common Buckthorn (*R. cathartica*). The flowers are also greenish and inconspicuous, but the fruits are more attractive—red for a time before turning purplish-black. The foliage turns reddish-green to yellow in late autumn.

A vigorous grower, it is tolerant of most soils and grows well in sun or considerable shade. Valued for the clean, glossy foliage and colorful fruit, it is used as a hedge, in border plantings, and for screens.

RHODODENDRONS

Rhododendron

The name *Rhododendron* is derived from the Greek words "rhodon" and "dendron", meaning rose-tree. These exquisite plants come from all parts of the world and have been grown in gardens for many centuries. They are divided into two groups: first, the deciduous types called azaleas; and second, the evergreen types known as rhododendrons. They comprise a large group of plants whose beautiful flowers, without a doubt, surpass in brilliance of color any other shrubs we have in our gardens.

In Michigan, unfortunately, it is difficult to successfully grow these lovely plants. The soil conditions are wrong (they require acid soil) and the winters are too cold.* Only in protected areas where soil and climatic conditions are favorable should the rhododendrons be tried. If, however, you are willing to give them the special care they demand, you will be well rewarded by the exquisite, colorful flowers in May.

*Many books and articles are available dealing with the cultural requirements of the rhododendrons.

Rhodotypos scandens (R. kerrioides)

6 ft. Zones 1, 2, 3, 4 BLACK JETBEAD

FLOWERS—White, single, four-petaled flowers, borne terminally on the branches, bloom intermittently from mid-May throughout the summer.

An upright grower with irregular, arching branches, the Jetbead is apt to become open and straggly with age unless pruned occasionally for compact growth. The foliage is a bright green color. The shining black, beadlike berries are in clusters of four at the tips of the branchlets and persist for an entire year.

The Black Jetbead grows in any average soil and tolerates shady situations. This worthwhile shrub grows well in congested, crowded areas, in shady spots, and even in smoky cities. It is valued for its flowers and clean foliage and is useful in borders or masses, particularly in shady places.

CURRENTS

Ribes

Unfortunately, many of the currants serve as the alternate hosts for the white pine blister rust, a fungus disease that attacks the five-needle pines. This disease has destroyed many Michigan white pine, particularly the young trees. The United States Department of Agriculture has forbidden the growing of certain *Ribes*, particularly *Ribes nigrum* (the European Black Currant) in Michigan and other states where white pines are growing. Certain species, however, are not carriers of the fungus and may be grown. The two listed, *R. alpinum* and *R. odoratum*, are fairly resistant and very worthwhile ornamental shrubs.

Ribes alpinum

6 ft. Zones 1, 2, 3, 4 ALPINE CURRANT

FOLIAGE—Deep green, three-lobed leaves appear very early in the spring.

This densely compact erect-growing shrub tends to become widespreading with age. The flowers which appear in early May are small, greenish-yellow and not very showy. Fruit is a red berry (on pistillate plants only) but not very ornamental. The USDA recommends planting the staminate plant as it is not susceptible to the white pine blister rust fungus. Growing in any average soil, it is valued for the very early foliage and ability to grow in



Fig. 34. Few shrubs have more colorful fruits than the Leland Firethorn.

shade. It is useful in masses, border, foundations, hedges, and in naturalistic plantings.

VARIETIES—

R. a. pumilum, the Early Alpine Currant, is a dwarf form with smaller leaves; it makes a neat hedge in shady areas.

Ribes odoratum

6 ft. Zones 1, 2, 3, 4 CLOVE CURRANT

FLOWERS—Golden yellow, fragrant flowers appear in late April or early May.

The branches of this shrub spread irregularly and droop gracefully to the ground. The foliage has three to five lobes and appears early in spring. Bright green in the summer, it turns rich red in autumn if planted in a western exposure. The fruit is a blackish berry of no ornamental importance. It grows in any average soil in sun or shade. It is valued for the good foliage and early clove-scented flowers; it is useful in borders, masses and naturalistic plantings.

SUMACS

Rhus

The sumacs (often erroneously pronounced "Shoemac") comprise a varied group of plants, two of which are poisonous; the others are good ornamental shrubs. They also vary from creeping vines to tall trees. Almost all of them have colorful reddish fruits (except the poison-



Fig. 35. The white flowers of the Black Jetbead are produced all summer.

ous ones, whose fruit is grayish) and brilliant yellow-orange to reddish autumnal foliage.

Many sumac are native to Michigan and are often found thriving in sandy, barren soils. The bark of certain species is used for tanning leather, and the foliage and fruits of some have been used by the Indians for medicine and for making dyes.

It should be noted that the sumacs are either polygamous or dioecious; some plants have only the staminate flowers and others have only the pistillate flowers that must be pollinated in order to produce fruits. They are also fairly short-lived plants; the wood is weak and brittle, making them susceptible to wind damage. Nevertheless, they are a valuable group of ornamentals which, if less



Fig. 36. The Fragrant Sumac with its colorful autumnal foliage and fuzzy red berries grow well, even on gravelly banks.

common and harder to grow, might be valued much more for their beauty.

It should be mentioned that two of the sumacs, *Toxicodendron radicans* (*Rhus toxicodendron*), the Poison Ivy, and *Rhus vernix*, the Poison Sumac, are native to Michigan. They are poisonous to most people and should be avoided, certainly not planted. A vine, the Poison Ivy has three leaflets and grayish fruits which make it fairly easy to recognize. The Poison Sumac is a tall shrub similar to the Smooth Sumac in habit. It has grayish fruits and the leaflets have entire margins, whereas the Smooth Sumac has reddish fruits and the leaflets have serrated margins. Fortunately, it grows mostly in wet, swampy places which are quite inaccessible. The foliage of both of these plants is most colorful in the autumn.

***Rhus aromatica* (*R. canadensis*)**

3 ft. Zones 1, 2, 3, 4 FRAGRANT SUMAC

The Fragrant Sumac is a low, widespread, compact-growing shrub with dense foliage even down to the ground. The leaves are three-parted and fragrant when crushed, with a dull green color in summer and brilliant reds and oranges in autumn. The flowers, yellowish in clustered spikes at the tips of the branches, appear in early May. The reddish hairy fruits, also in clusters in late summer, are partially hidden by the foliage.

This species grows best in well-drained sandy soils. Valued for its low, compact growth and brilliant foliage, it is used as a foreground shrub in borders or mass plantings and especially in naturalistic plantings or banks.

Another sumac, *Rhus trilobata* (the Skunkbush Sumac), with similar foliage is often mistaken for the Fragrant Sumac; but its foliage is ill-scented and less hairy, and it has a more upright habit of growth.



Fig. 37. The Smooth Sumac has mahogany-red fruit heads that persist well into winter.

Rhus copallina

6 ft. Zones 1, 2, 3, 4, FLAMELEAF SUMAC (Shining Sumac)

An erect-growing shrub, this species is usually under 6 feet high in Michigan; in milder climates it grows to a tree 30 feet high. It spreads readily by suckering roots, sometimes to 25 feet or more. The foliage is pinnately compound, having small wings on the stalks between the leaflets. A shining, deep green in the summer, it turns rich crimson in autumn and is one of the best for autumnal coloration. The terminal clusters of greenish flowers are not very ornamental, nor are the reddish fruits so showy as other similar sumacs. It grows best in well-drained soils and is useful in masses and borders, especially in naturalistic areas.

Rhus glabra

15 ft. Zones 1, 2, 3, 4 SMOOTH SUMAC

This large, widespread, irregular shrub spreads by suckering roots. The pinnately compound foliage is a deep green during the summer, turning brilliant shades of reds and oranges in autumn. The large terminal clusters of greenish flowers in early July are not too ornamental. Compact clusters of mahogany-red seeds are showy against the green foliage in late summer and even after the leaves drop, since the fruit persists all winter.

This species is not particular about soil but grows best in well-drained sandy soils. Valued for its showy fruits and the attractive autumnal foliage, it is used chiefly in naturalistic plantings and in masses and borders in large-scale areas.

Both native to Michigan, this sumac and the Staghorn Sumac (*R. typhina*) are quite similar in many ways. To tell them apart, remember that the Smooth Sumac has smooth twigs and the Staghorn Sumac's twigs are covered with many blackish hairs.

VARIETIES—

R. g. laciniata (the Cutleaf Smooth Sumac) has foliage that is deeply cut, producing a fine-textured effect.

Rhus typhina

20 ft. Zones 1, 2, 3, 4 STAGHORN SUMAC

The Staghorn Sumac, a large-growing, coarse, treelike



Fig. 38. The Cutleaf Staghorn Sumac has deeply cut, fine-textured foliage.

shrub, also spreads by suckering roots. In native plantings found along the roadsides and fence rows, one clump may spread over 100 feet in length. When restricted to a few main trunks, it develops into an open, straggly and often picturesque plant. The foliage is pinnately compound. Bright green during the summer, it turns to red and orange in the autumn. The greenish flowers are in large terminal clusters that bloom in late June. The fruits are loose clusters of reddish, hairy seeds at the tips of the branches which make an attractive display in late summer and most of the winter.

This species grows in any well-drained sandy soil. Spotting the landscape with brilliant colors, it is one of the most colorful native plants in Michigan during the fall. It is used mostly in naturalistic plantings and other large-scale areas.

VARIETIES—

R. l. laciniata, the Cutleaf Staghorn Sumac, has foliage that is deeply cut, producing a fine-textured effect.

ROSES

Rosa

During the early summer, the beautiful, fragrant flowers of the roses add much color and interest. For centuries, they have been admired and cultivated in gardens of all lands, and horticulturists have developed so many hybrids



Fig. 39. A good shrub rose with light yellow flowers is the Father Hugo Rose.



Fig. 40. The popular Japanese Rose has dainty white flowers in clusters.

that it is difficult today to differentiate between some of them. Old, reliable ones are constantly being discarded for newer, better ones. Thousands of varieties are recognized, and some nurseries specialize in growing and selling only roses. Many books have been written on them and there are societies devoted to their culture. Many roses are native to Michigan, growing wild in our meadows and roadsides.

A few of the shrubby roses that are particularly adapted to ornamental plantings will be discussed in this bulletin. For more detailed information about roses, see U.S.D.A. Home and Garden Bulletin No. 25, "Roses for the Home."

Rosa hugonis

6-8 ft. Zones 1, 2, 3, 4 FATHER HUGO ROSE (Golden Rose of China)

FLOWERS—A light yellow, single blossom nearly 2 inches in diameter appears in mid-May. One of the earliest to bloom, it is the best of the single yellow roses.

The arching branches of this upright-grower are covered with little prickles and bristles. The foliage is fine-textured, and pinnately compound, with 5 to 11 small leaflets. The fruit is a blackish-red hip that is not ornamental. It grows in any garden soil that is well drained, but requires a sunny and open situation for best effect. Prune out old canes occasionally to renew growth. This rose blends well with other shrubbery, and it is used in groups and masses or as a specimen.

Rosa multiflora

8 ft. Zones 1, 2, 3, 4 JAPANESE ROSE

FLOWERS—A white, single blossom 1 inch in diameter appears in many flowered clusters that cover the entire plant in early June.

FRUIT—Small, red hips are produced in clusters; they are effective from early fall throughout most of the winter unless eaten by birds.

The Japanese Rose is a vigorous grower with arching, reclining branches that intertwine, making a dense impenetrable thicket. A bright green color all summer, the

foliage is pinnately compound with 9 leaflets. It grows in almost any well-drained soil. The dense growth and its ability to grow in most situations makes this a very worthwhile shrub. The United States Soil Conservation Service has recommended it for "Living Hedges", especially for farms. Recent experiments by Highway Departments as a "Living Safety Barrier" have been quite successful. It has also been used by Conservation Agencies in wildlife planting for many years.

VARIETIES—

R. m. carnea, The Pink Japanese Rose, has double pink flowers.

R. m. platyphylla (the Seven-sisters Japanese Rose) has double deep pink flowers. It is called the Seven-sisters Rose because occasionally the flowers on one cluster will be of seven different shades of pink.

Rosa rugosa

4-6 ft. Zones 1, 2, 3, 4 RUGOSA ROSE

FLOWERS—Typical flowers are purple, fragrant, single, and 2 to 3 inches in diameter. They appear in early June and intermittently all summer. However, a great many varieties with flowers that are white, pink or rose, single or double, are available.

FRUIT—Large, 1 inch in diameter, orange-red hips are showy in late summer and fall.

The many stout canes of *R. rugosa* make a dense, round-topped shrub which spreads considerably by suckering roots. The foliage is pinnately compound with five to nine leaflets. Wrinkly, glossy deep green in summer, it turns orange and scarlet in autumn. It grows in any well-drained soil in sun or partial shade. It is best to cut old canes occasionally and control suckers since hybrids may be grafted on other rose understock. Use it as a specimen, in groups and masses. A great many varieties are available, a few of which are listed below:

VARIETIES—

- R. r. alba*—flowers are single, white.
- R. r. albo-plena*—flowers are double, white.
- R. r. plena*—flowers are double, pink.
- R. r. rosea*—flowers are single, rose.
- R. r. "Max Graf"*—flowers are single, pink; a trailer.



Fig. 41. The orange-red hips of the Rugosa Rose are quite handsome.

Rosa setigera

6 ft. Zones 1, 2, 3, 4 PRAIRIE ROSE

FLOWERS—Pink, single flowers are 2 inches in diameter, and appear in clusters in early July.

This is a broad-spreading, vinelike plant with long arching branches that mound up into a dense, sprawly thicket. The foliage is three-parted, good green in the summer and turning bronzy-red in autumn. The fruits are dull-red hips in clusters. It grows in any well-drained soil but needs plenty of room. Valuable for its late-blooming flowers and colorful autumnal foliage, it can be trained as a vine on a fence or other structure. It is largely used in naturalistic plantings and for game cover plantings.

Rosa rubrifolia

6 ft. Zones 1, 2, 3, 4 REDLEAF ROSE

FOLIAGE—Purplish blue-green leaves are colorful all season. Pinnately compound, seven to nine leaflets are fine-textured in effect.

This is an upright-growing shrub that spreads by suckering roots. The single pink flowers bloom in early June. The fruits are bright red hips. It grows in any well-drained soil. Valued for its purplish foliage, it is used for color accent or contrast in borders and with other roses.

Rosa wichuraiana

1 ft. Zones 1, 2 WICHURA ROSE (Memorial R.)

FLOWERS—White with golden stamens, a fragrant, single, 2-inch wide blossom appears in mid-July. Varieties with pink flowers are also available.

FOLIAGE—Dark glossy green, it is pinnately compound with seven to nine leaflets; it is fine-textured in effect, and nearly evergreen, especially if protected from winter sun.

This rose is a low-growing, creeping vine with long trailing canes which force a dense mat. The fruits are small, reddish hips of no ornamental value. It grows in any average well-drained soil. The parent of many of our rambler rose varieties, it is useful as a ground cover on a bank or over barren slopes and for trailing over a rock wall.

Salix purpurea nana

4 ft. Zones 1, 2, 3, 4 DWARF PURPLEOSIER WILLOW

This dwarf willow is a vigorous growing, round-topped shrub with many slender twigs that turn purplish in the winter. The foliage is fine-textured, narrow, and grayish-green color, remaining late in the fall. It grows best in moist situations but adapts to any average soil in sun or partial shade. A dwarf, fine-textured shrub, it is used considerably for low hedges.

Sambucus canadensis

5-12 ft. Zones 1, 2, 3, 4 AMERICAN ELDER

FLOWERS—Small, white, in large flat-topped clusters 6 to 8 inches in diameter, it blooms in late June.

FRUIT—Small, purplish-black berries a quarter of an inch wide grow in flat clusters and ripen in Sep-



Fig. 42. The American Elder, a common native shrub of Michigan, does extremely well in moist soils.

tember and October. They are eaten by birds and are also used for making pies and wines.

This native of Michigan is usually found growing in rich, moist soils. It is a broad-spreading shrub with many erect stems that are pithy and very brittle. If overgrown and straggly, this species can be cut to the ground as they are rapid growers and will quickly grow back again. The foliage is a bright green, pinnately compound, and has 5 to 11 leaflets. This shrub is not recommended for the small garden. It is best if used in naturalistic plantings near water.

VARIETIES—

- S. c. acutiloba*—The leaflets are deeply cut.
- S. c. aurea*—The foliage is yellow and the berries are cherry-red.
- S. c. maxima*—The leaflets are larger and the flower clusters are to 12 inches in diameter.

Sambucus pubens

6-15 ft. Zones 1, 2, 3, 4 SCARLET ELDER

FLOWERS—Small, creamy-white flowers in pyramidal clusters bloom in mid-May.

FRUIT—Small, bright scarlet berries in erect clusters ripen in late June and July.

The Scarlet Elder is much like *S. canadensis* in general appearance. In the spring, the purplish buds are larger than those of the American Elder. The foliage usually has only five leaflets. Also a native of Michigan, it grows best in a rich, moist soil in either sun or a partial shade. It is valued for its early red fruit and is used in naturalistic plantings.

VARIETIES—

- S. p. dissecta*—leaflets are deeply cut.

Another species, *S. racemosa* (the European Red Elder), is very similar to our native Scarlet Elder.

Sorbaria sorbifolia

3-5 ft. Zones 1, 2, 3, 4 URAL FALSESPIREA

FLOWERS—Large, terminal, plumelike clusters of small,

creamy-white flowers are very showy in July. The faded flower heads should be removed as they become unsightly.

This is a vigorous, erect-growing shrub with many stiff branches that are crooked and quite brittle. Spreading by underground stolons, it often becomes a pest in a garden. The foliage is pinnately compound with 13 to 23 leaflets. Bright green in color, it appears very early in the spring. This plant is frequently called the Ash-leaved Spirea because its leaves resemble those of the *Sorbus* or Mountain Ash. It prefers a rich, moist soil but will grow in almost any soil in either sun or considerable shade. The top growth winterkills in Michigan; remove dead and old wood each spring. Use this shrub for undergrowth plantings, on steep banks for erosion control, or in large masses.

Another species, *S. arborea* (the Tree Falsespirea), grows taller to 18 feet. It blooms later, does not sucker as much, and makes a good, tall background plant on the shrub border.

SPIREAS

Spiraea

The spireas are perhaps the most common and popular ornamental shrubs used in the average garden. In some cases, they probably have been overused. They are very tolerant of growing conditions and, except for occasional thinning or removal of dead twigs, they require very little care. Most of them are valued for their decorative white or rose flowers; a few are noted for their autumn foliage. The fruits are small, brownish, dried seed pods that have no ornamental value. They are a serviceable group of plants, usually having graceful arching branches; when properly selected and arranged, they contribute much interest to a garden.



Fig. 43. The small white flowers of the Garland Spirea appear before the leaves and cover the entire shrub.

Spiraea arguta

3-5 ft. Zones 1, 2, 3, 4 GARLAND SPIREA

FLOWERS—Small, five-petaled, white flowers in clusters cover the branches before the leaves appear; very showy, they bloom in early May.

This hybrid (*S. thunbergii* x *S. multiflora*) is a compact, round-topped shrub with many slender, arching branches. The twigs tend to winterkill and annual spring pruning of the dead twigs is desirable. The foliage is fine textured; a bright green color during the summer, it occasionally



Fig. 44. Anthony Waterer Spirea is used as a flowering hedge in this garden.



Fig. 45. White flowers in great profusion are the chief attraction of the popular Vanhoutte Spirea.

turns a bronzy-orange in late autumn. These shrubs have fibrous roots and grow in any good garden soil. Use them in front of taller shrubbery, in foundation plantings, and in masses.

The Garland Spirea is similar to the Thunberg Spirea (*S. thunbergi*), but is taller, hardier and has larger and showier flowers.

***Spiraea bumalda* "Anthony Waterer"**

2 ft. Zones 1, 2, 3, 4 ANTHONY WATERER SPIREA

FLOWERS—Small, bright rosy-crimson flowers in flat clusters bloom from mid-June through the summer.

A hybrid (*S. albiflora* x *S. japonica*), this dwarf, compact, upright-growing, flat-topped plant is one of the best and most popular small shrubs for summer flowering effect. The foliage is fine-textured; tinged pink when it appears in spring, it turns a dull green color for the summer. It grows well in any garden soil. Since the flowers are borne on new wood, this spirea will stand considerable thinning of old wood in early spring. Use this hybrid in the foundation planting, in front of taller shrubbery, as a flowering hedge, or whenever a plant of low stature is desired.

Another variety, *S. c. froebeli* (the Frobel Spirea), is similar but taller. Coarser, it blooms about 10 days earlier.

Spiraea prunifolia plena

6 ft. Zones 1, 2, 3, 4 BRIDALWREATH SPIREA

FLOWERS—Small, double, white buttonlike flowers in



Fig. 46. The waxy white berries of the Common Snowberry contrast beautifully with the dark foliage.

little clusters bloom in mid-May, remaining effective for 2 weeks or more.

This erect, rather stiff-growing shrub with slender branches is likely to become leggy and have an open base with age. The foliage is medium-fine textured; its glossy green summer color turns orange-red in autumn. It prefers a good, fertile, well-drained soil and a sunny situation. It is, however, the most difficult spirea to grow. Valued for its double, showy flowers and brilliant autumnal foliage, it is used in borders, in masses, and as a background shrub in foundation plantings.

Spiraea thunbergi

3 ft. Zones 1, 2, 3, 4 THUNBERG SPIREA

FLOWERS—Small, white flowers in clusters cover the numerous graceful branches before the leaves appear in early May. Flower petals are narrower than those of *S. arguta*, and the flowering effect is not so showy.

This is a small, round-topped, slender-branched shrub. The fine-textured foliage is bright green in the summer and turns a soft bronzy-orange in late fall. It grows in any average soil with a fair amount of moisture. Annual spring removal of dead twigs and an occasional thinning are necessary for best appearance. Use it in front of taller shrubs, in foundation plantings, and in masses.

Spiraea vanhouttei

6 ft. Zones 1, 2, 3, 4 VANHOUTTE SPIREA

FLOWERS—Small, white flowers in flat clusters cover the entire shrub in late May. This is one of the best and most popular flowering shrubs, perhaps so common and so widely planted that its beauty is not always fully appreciated.

This hybrid, (*S. cantoniensis* x *S. trilobata*), is an upright-growing, widespreading shrub with graceful arching branches that touch the ground. The foliage is medium to fine-textured, a dark bluish-green color during the summer often turning a brilliant coppery-orange in the fall. It grows in any average soil but prefers a sunny situation. It is one of the best general purpose shrubs: useful as a specimen, in borders, in foundation plantings, as a hedge, and in many other ways.

***Symphoricarpos albus laevigatus* (*S. racemosus*)**

5 ft. Zones 1, 2, 3, 4 COMMON GARDEN SNOWBERRY

FRUIT—Snow-white, waxy berries, a half inch or more in diameter, grow in terminal clusters that are very ornamental from September until frost.

The slender arching branches and numerous suckering shoots make this a widespread shrub. The medium-fine, dark bluish-green foliage is retained well into the fall. The small, pinkish flowers in terminal clusters are not very showy. This shrub grows in any average, well-drained soil and withstands considerable shade. Sometimes, however, it mildews badly in shady situations, causing the foliage to discolor. Annual thinning of some of the branches in early spring is desirable. It makes a good thicket shrub in shady areas.

Symphoricarpos chenaulti

4 ft. Zones 1, 2, 3, 4 CHENAULT CORALBERRY

FRUIT—Small, red berries with white spots on one side grow in clusters along the ends of the branches.

This hybrid (*S. microphyllus* x *S. orbiculatus*), is a wide-spreading shrub with slender arching branches much like *S. orbiculatus*, the Indiancurrant Coralberry. The foliage and flowers are quite similar but the fruits are more showy. It grows in any average garden soil and is used in the same way as the Indiancurrant Coralberry.

***Symphoricarpos orbiculatus* (*S. vulgaris*)**

4 ft. Zones 1, 2, 3, 4 INDIANCURRANT CORALBERRY

FRUIT—Small, purplish-red berries are clustered along the ends of the branches.

This is a suckering, broad-spreading shrub whose upright arching branches bend down and root, forming a dense, tangled mass. The foliage is medium-fine and grayish-green in color. The small, inconspicuous, yellowish-white flowers bloom in mid-July. It is apt to become straggly and unsightly, so occasionally thin and remove dead wood. It is a good low shrub for planting on slopes, in the shrub borders, and as undergrowth in shady areas.

LILACS

Syringa

The lilacs, among our most popular shrubs, are valued for their showy, usually fragrant flowers and their deep



Fig. 47. Last of the lilacs to bloom is the handsome Japanese Tree Lilac.

green foliage. Although they are quite at home in North America, their native homes are scattered over Europe and Asia. They were among the first shrubs to be introduced by the early colonists who made room for them on their crowded sailing vessels. All along the New England coast there are lovely, very old bushes in the gardens. The early settlers took them along as they moved westward, and we find lilac shrubs in many old gardens throughout the middle west. Today, we often find a lilac shrub growing beside a pile of stones—evidence that here was once a home.

The lilacs are quite tolerant of growing conditions and are very long-lived plants. They are, unfortunately, bothered by a few pests, especially the lilac scale, a small insect that is easily controlled by a dormant spray of some miscible oil.

Syringa amurensis japonica

30 ft. Zones 1, 2, 3, 4 JAPANESE TREE LILAC

FLOWERS—Large, showy, creamy-white terminal panicles bloom in mid-June. Not fragrant, this is the last of the lilacs to bloom.

This small tree is quite pyramidal in its youth, but, with age, it becomes a widespread, round-topped, handsome tree. The large, coarse-textured, dark green leaves hang on late in the fall, and the reddish cherrylike bark is interesting during the winter. This plant, a fairly rapid grower, does well in any average soil, but requires a sunny, open situation for best effects. It makes an excellent specimen tree.

***Syringa chinensis* (*S. rothomagensis*)**

15 ft. Zones 1, 2, 3, 4 CHINESE LILAC

FLOWERS—Showy, terminal panicles of fragrant lilac-



Fig. 48. The Chinese Lilac, with its fragrant lilac-purple flowers, makes an excellent flowering hedge.

purple flowers are produced profusely in late May; this is the best lilac for flowering effects.

Although called the Chinese Lilac, it is not a native of China, but a hybrid (*S. persica* x *S. vulgaris*), originating by chance in the Botanical Garden at Rouen, France. It is a compact, erect-growing, broad-spreading, round-topped shrub with graceful, arching branches. The dark green foliage is medium-textured. A rapid and vigorous grower, the Chinese Lilac is easy to grow in almost any soil, but requires a sunny, open situation. It is a most useful shrub; excellent as a specimen, desirable for informal hedges or foundation plantings, and good in screens, borders, and masses.

VARIETIES—

S. c. alba—flowers white.

S. c. saugeana—flowers are lilac-red, a better, brighter color than those of the species.

Syringa oblata dilatata

12 ft. Zones 1, 2, 3, 4 KOREAN EARLY LILAC

FLOWERS—Dense, rather broad panicles of lilac-pink flowers appear in early May; this is the earliest of the Lilacs to bloom.



Fig. 49. The Common Lilac, long a favorite in Michigan gardens, is available in a great many varieties.

FOLIAGE—Violet-red to bronze-red in the autumn, this is the only Lilac having fall coloration.

This native of Korea, a round-topped shrub much like the Common Lilac in habit and cultural requirements, is chiefly valued for its early flowers and wine-red autumn foliage. A very hardy variety, it is a worthy plant but may be difficult to locate in nurseries.

Syringa villosa

10 ft. Zones 1, 2, 3, 4 LATE LILAC

FLOWERS—Erect, rather narrow panicles of fragrant, light, rosy-lilac flowers are produced in early June.

This Chinese Lilac, a vigorous shrub with erect, stout branches and rather coarse-textured foliage, is one of the hardiest of all the lilacs. An excellent shrub for northern Michigan gardens, it grows in any average soil in sunny situations, and is useful as a specimen, as screens, and in shrub borders.

Varieties of another species, *S. prestoniae*, the Preston Lilac, have been developed by Miss Isabella Preston, horticulturist of the Canadian Experiment Station, Ottawa, Canada. These varieties are superior to the late Lilac because of their larger, brighter colored flowers.

VARIETIES—

S. p. "Isabella"—large pyramidal pink flower panicles make it one of the best.

S. p. "Donald Wyman"—deep pink flowers.

Syringa vulgaris

20 ft. Zones 1, 2, 3, 4 COMMON LILAC

FLOWERS—Attractive, twin-panicles of fragrant, usually lilac-colored flowers bloom in mid-May. Hundreds of varieties are available: single, semi-double and doubles. They range in color from white through azure blue to almost violet and from common lilac to purple, reddish magenta and lilac pink. Consult nursery lists for available varieties in colors desired.

This old favorite of the garden is so common it hardly needs describing. An upright-growing shrub or small tree with stiff branches and usually irregular in outline, it has deep green, heart-shaped leaves. The Common Lilac prefers a good well-drained loam and a sunny, open situation for best flowering effects. Valued for the lovely flowers, they are especially good as specimens, to furnish color accents in the shrub border, and to produce charming effects in masses.

RECOMMENDED VARIETIES

A few good varieties of the many offered are:

Charles Joly—Double, dark red.

Charles the Tenth—Single, purple-red.

Decaisne—Single, purplish-lilac.

DeMirabel—Single, bluish-violet; blooms late.

Edith Cavell—Double, pure white; blooms late.

Emil Gentil—Double, cobalt blue.

Jacques Callot—Single, rosy pink.

Jan Van Tol—Single, pure white.

Lucie Baltet—Single, rosy-pink.

Ludwig Spaeth—Single, dark crimson-purple.

Marie Legraye—Single, creamy white.



Fig. 50. The flowers of the Tamarix are small, dainty, and pink in color.

- Mme. F. Morel—Single, pinkish lavender.
- Monge—Single, rose-purple.
- Montaigne—Double, rosy mauve.
- Mont Blanc—Single, white.
- Paul Thirion—Double, claret-rose.
- President Fallieres—Double, lilac-rose.
- President Lincoln—Single, blue.
- Vestale—Single, pure white.
- Victor Lemoine—Double, blue lavender.

Tamarix parviflora

15 ft. Zones 1, 2, 3 SMALL-FLOWER TAMARIX

FLOWERS—Small, dainty, pink flowers in large, fluffy masses bloom in late May. It is probably the earliest of the Tamarix to bloom.

FOLIAGE—Very small, scalelike leaves, bright green in color, have a feathery texture.

A large, erect-growing shrub with slender branches, it tends to be loose and open at the base. The fine twigs winterkill in Michigan and require considerable pruning. Pruning should be done after the flowering period because the flowers are borne on the previous season's growth. It prefers a light, sandy, well-drained soil in a sunny situation. The light, airy foliage and the delicate, fluffy flowers

give the Tamarix an exotic appearance. Use it carefully, either as a specimen, in groups, or wherever a dainty, feathery effect is desired.

Tamarix pentandra

15 ft. Zones 1, 2, 3, 4 FIVESTAMEN TAMARIX

FLOWERS—Small, rosy-pink flowers in fluffy masses, bloom in mid-July.

FOLIAGE—Very small, scale-like leaves are bluish-green color and have a feathery texture.

This large, erect-growing shrub with slender branches tends to become bare and open at the base. It is hardier than *T. parviflora*, and the flowers are borne on the current season's growth. It should be heavily pruned each spring to keep it dense and shapely. It prefers a light, sandy, well-drained soil in a sunny situation. An exotic plant, it is valued for its fine, feathery foliage and dainty flowers. It is useful as a specimen, in groups, and for light textured effects, but it is difficult to combine with other shrubs.

Another species, *T. odessana* (the Odessa Tamarix) is similar in general appearance but only grows to about 6 feet in height.

VIBURNUMS

Viburnum

The versatile viburnums add color and interest to the garden every season of the year. Several are valued for their attractive, sometimes fragrant flowers in the spring; some have bright colored fruits in the late summer and fall; and the foliage of most of them turns rich red or purple in the fall. Most viburnums prefer cool, moist, fertile soils and withstand partial shade, although there are several that do well on higher, drier lands in full exposure. They are handsome and valuable as specimens, in screens, borders, hedges or masses, and should find extensive usage in landscape plantings.

Viburnum burkwoodi

4-6 ft. Zones 1, 2 BURKWOOD VIBURNUM

FLOWERS—Globose clusters, 2 to 3 inches in diameter, of fragrant white flowers bloom in mid-May, a few days after the Koreanspice Viburnum.

This hybrid (*V. carlesii* x *V. utile*) has flowers somewhat like those of *V. carlesii*, but they are not pinkish in bud. It has finer branches and a more open growth habit; and the foliage is nearly evergreen, a glossy dark green above and lighter beneath. Since it is grown on its own roots, it seems to be more vigorous than the Koreanspice Viburnum. It makes an excellent specimen and is also effective in borders and masses.

Viburnum carlesii

3-5 ft. Zones 1, 2, 3 KOREANSPICE VIBURNUM (Fragrant V.)

FLOWERS—Globose clusters, 2 to 3 inches in diameter, of pink to white fragrant flowers bloom in mid-May.



Fig. 51. The Koreanspice *Viburnum*, with its very fragrant pinkish-white flowers, is a desirable specimen.

FOLIAGE—Coarse, dull green leaves turn a rich, reddish-purple in the fall. One of the best ornamental shrubs for autumnal color.

This round-topped, dense shrub grows best in a well-drained, cool, rocky or sandy soil. Since it is usually grafted on understock of *V. lantana*, a vigorous growing species that may sucker and take over the choice Koreanspice *Viburnum*, the suckering shoots should be cut out. The rich, spicy fragrance of the flowers, much like that of the Trailing Arbutus (*Epigaea repens*), makes this a choice specimen plant.

A recent introduction, *Viburnum carlecephalum* (*V. carlesii* x *V. macrocephalum*) has large flowers, but its hardness in Michigan is questionable.

Viburnum cassinoides

6 ft. Zones 1, 2, 3, 4 WITHEROD VIBURNUM

FRUIT—Clusters of berries are first light yellow-green, then pink, red and finally bluish-black, with fruit of several colors present at the same time.

FOLIAGE—Bright green leaves during the summer turn a dull purplish-red to orange-red in autumn.

This native to Michigan is a compact, upright-growing, symmetrical shrub with slightly arching branches. The flowers are creamy-white, blooming in flat clusters in early June. It grows in any average soil, in sun or partial shade. Valued for its autumnal color effect, it is used in borders, masses and naturalistic plantings.

Viburnum dentatum

12-15 ft. Zones 1, 2, 3, 4 ARROWWOOD VIBURNUM

FOLIAGE—Bright green in the summer, it turns a rich glossy red in the autumn.

This vigorous, upright-growing shrub with dense foliage is native to Michigan, and grows in any average soil in sun or partial shade. The branches are slender and very straight and supposedly were used by the Indians for making arrows, hence its common name. The creamy-white flowers are in flat clusters blooming in early June; the fruits are bluish berries. It is valued chiefly for its clean foliage; it is used in borders, screens, masses, and naturalistic plantings.

Viburnum lantana

12-15 ft. Zones 1, 2, 3, 4 WAYFARINGTREE VIBURNUM

FLOWERS—Flat clusters of white flowers bloom in mid-May.

FRUIT—Clusters of berries are first bright red and later black.

FOLIAGE—Coarse, wrinkled, dull bluish-green leaves turn a reddish purple in autumn.

This tall, often treelike, upright-growing shrub is a vigorous grower that does well in almost any soil, even dry areas. Its ease of cultivation and its hardiness, as well as its distinctive beauty, make it useful as a specimen, in borders, and in masses.

Viburnum lentago

10-15 ft. Zones 1, 2, 3, 4 NANNYBERRY VIBURNUM

FLOWERS—Flat clusters of creamy-white flowers bloom in late May.

FOLIAGE—Glossy green leaves in the summer turn purplish-red in the fall.

Another native viburnum that is a large, erect, open-growing shrub, it does well in even rather difficult situations of shade and dry soil. The blue-black, bloomy ber-



Fig. 52. A worthy addition to any garden is the Wayfaringtree *Viburnum*. Colorful in flower, fruit and foliage, it grows well in almost any situation.



Fig. 53. The scarlet-red berries of the European Cranberrybush *Viburnum* are colorful from early fall throughout the winter.

ries are in drooping clusters. This species is especially useful as a background shrub and is very effective in woodland margins.

Viburnum opulus

8-12 ft. Zones 1, 2, 3, 4 EUROPEAN CRANBERRYBUSH
VIBURNUM

FLOWERS—Flat clusters of white flowers bloom in late May. The flowers in the center of the cluster are fertile and the outer ones are sterile and very conspicuous.

FRUIT—Clusters of scarlet-red berries are effective in early fall and throughout the winter.

FOLIAGE—Three or five-lobed leaves are bright green in the summer, changing to red or purplish-red in the autumn.

This popular viburnum is a dense, irregular growing shrub with arching branches that grows well in average soils and tolerates some shade. This species is often bothered by plant lice which cause the leaves and young twigs to curl badly. It is effective as a specimen, in borders and masses.

VARIETIES—

V. o. nanum, the Dwarf European Cranberrybush Viburnum, is a dwarf, non-flowering variety, under 2 feet tall, that makes a nice low hedge.

V. o. roseum (*V. o. sterile*), the Common Snowball, has clusters of sterile creamy-white flowers that are very showy.

V. o. xanthocarpum, the Yellowfruit European Cranberrybush Viburnum, has golden yellow fruit.

Viburnum sieboldi

15-20 ft. Zones 1, 2, 3, 4 SIEBOLD VIBURNUM

FLOWERS—Flat clusters of creamy-white flowers bloom in late May.

FOLIAGE—Large, bright green leaves have a wrinkled appearance; they turn dull red in late fall.

A large-growing, vigorous, treelike shrub with dense,



Fig. 54. The Japanese Snowball *Viburnum* has sterile flowers and is the best of the snowballs.

heavy foliage, the Siebold Viburnum is a very desirable plant. It has clusters of red berries that change to black on bright red fruit-stalks which are also attractive. The largest of the viburnums, it grows in any garden soil if it is moist and in either sun or shade. Valued especially for the rich foliage, it is useful as a specimen and in borders of large-scale plantings.

Viburnum tomentosum

8-10 ft. Zones 1, 2, 3 DOUBLEFILE VIBURNUM

FLOWERS—Flat clusters of creamy-white flowers bloom in late May. The flowers in the outer ring are sterile and very showy.

FRUIT—Clusters of red berries change to black.

FOLIAGE—Deep green, wrinkled leaves turn a dull reddish-purple in the fall.

This vigorous, wide-spreading shrub with almost horizontal branches and dense foliage is one of the best viburnums for ornamental plantings. It grows in average garden soils in sun or partial shade, and is useful as a specimen, in borders and masses.

VARIETIES—

V. t. mariesi (the Maries Doublefile Viburnum), has larger, showier flowers.

V. t. sterile (*V. t. plicatum*), the Japanese Snowball Viburnum, has sterile flowers making a very showy

globose cluster; it blooms about 1 week later than the species.

Viburnum trilobum (V. americanum)

8-12 ft. Zones 1, 2, 3, 4 AMERICAN CRANBERRYBUSH
VIBURNUM

FLOWERS—Flat clusters of white flowers bloom in late May. The flowers in the center of the cluster are fertile; the outer ones are sterile and very showy.

FRUIT—Clusters of orange-scarlet berries, three-eighths of an inch in diameter, begin to color in July and remain on the branches all winter. Fruit is edible and is frequently used for preserves.

FOLIAGE—Three-lobed leaves are bright green in the summer, changing to reddish in the autumn.

The American Cranberrybush Viburnum is a broad-spreading shrub much like the Common European Cranberrybush Viburnum, but it is hardier and more open growing. This native of Michigan is found in lowlands but grows well in any average soil in sun or partial shade. It is useful as a specimen, in borders, and in naturalistic plantings.

Weigela florida (W. rosea)

8 ft. Zones 1, 2, 3? OLDFASHIONED WEIGELA

FLOWERS—Rosy-pink, trumpet-shaped flowers are produced in great abundance on short, lateral twigs along the branches in late May. A great many varieties are available, with flowers ranging from white to pink to deep red.

This erect-growing, dense shrub has rather coarse-textured, dark green foliage. The fruit is a two-valved capsule of no ornamental value. It prefers a fertile soil and does best in a protected sunny situation. The branches



Fig. 55. Weigelas bring color to any garden.

occasionally winterkill and require annual pruning for compact growth and shapeliness. It is valued for its handsome flowers and should be used as a specimen or in groups.

VARIETIES—

W. f. alba—flowers are white, changing to light pink.

W. f. "Bristol Ruby"—flowers are ruby-red; hardier, it grows to 5 feet tall.

W. f. "Eva Rathke"—flowers are carmine-red. Very popular, it is hardier, and grows to 6 feet tall.

W. f. "Vaniceka"—flowers are rosy-pink; larger, it is very hardy and grows to 6 feet tall.

W. f. variegata—flowers are deep rose. Leaves are edged with pale yellow, and the shrub grows to 6 feet tall.

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Gray Dogwood	9	Privets	16	Tree Lilac.....	29
Hibiscus	14	Purple Smoketree.....	9	Truehedge Columnberry	5
Hills of Snow Hydrangea.....	14	Purpleleaf Sand Cherry.....	21	Vanhoutte Spirea	28
Hollies	15	Purpleosier Willow.....	26	Vernal Witchhazel.....	13
Hollygrape	19	Quince	7	Viburnums	31
Honeysuckles	17	Red*		Virginal Mockorange	20
Hydrangeas	14	Red Osier Dogwood	9	Wahoo Euonymus.....	12
Ibodium Privet	16	Redleaf Barberry.....	5	Warty Barberry.....	5
Indiancarant	29	Redleaf Rose	26	Wayfaringtree Viburnum	32
Inkberry	15	Regels Privet	17	Weeping*	
Japanese*		Rhododendrons	22	Weigelas	34
Jetbead	23	Rock Cotoneaster.....	10	Wichura Rose	26
Kerria	16	Rockspray Cotoneaster.....	10	Winged Euonymus	11
Korean Boxwood.....	6	Rose of Sharon.....	14	Winter Honeysuckle.....	17
Koreanspice Viburnum	31	Roses	25	Winterberry	16
Laburnum	16	Rugosa Rose	26	Wintergreen Barberry.....	5
Laland Firethorn.....	22	Russian Olive	11	Witchhazel	13
Late Lilac	30	St. Johnswort	15	Witherod Viburnum	32
Lemoine*		Saucer Magnolia.....	19	Yellowtwig Dogwood	9
Lilacs	29	Scarlet Elder.....	27	Zabel Honeysuckle.....	17
Magnolias	19	Scotch Laburnum.....	16		

* Look under specific name of plant.

Shrubs to Use for Special Purposes

SHRUBS WITHSTANDING SHADY SITUATIONS

Acanthopanax sieboldianus
 Aronia species
 Berberis species
 Buxus species
 Colutea arborescens
 Cornus species
 Euonymus kiautschovicus
 Forsythia species
 Hamamelis species
 Hydrangea species
 Ilex species
 Ligustrum species
 Lonicera species
 Mahonia aquifolium
 Physocarpus species
 Pyracantha coccinea lalandi
 Rhamnus species
 Rhus aromatica
 Rhodotypos scandens
 Ribes alpinum
 Sambucus pubens
 Sorbaria sorbifolia
 Symphoricarpos species
 Viburnum cassinoides
 V. dentatum
 V. lentago
 V. lantana
 V. tomentosum

SHRUBS WITHSTANDING MOIST SOILS

Aronia species
 Cornus alba siberica
 C. amomum
 C. stolonifera
 Ilex glabra
 I. laevigata
 I. verticillata
 Salix purpurea nana
 Sambucus species
 Viburnum cassinoides
 V. dentatum
 V. opulus
 V. trilobum

SHRUBS WITHSTANDING DRY SOILS

Acanthopanax sieboldianus
 Berberis mentorensis
 Berberis thunbergi
 Caragana arborescens
 Chaenomeles lagenaria

Colutea arborescens
 Cornus racemosa
 Cotinus coggygia
 Elaeagnus augustifolia
 Hamamelis virginiana
 Hypericum prolificum
 Ligustrum species
 Lonicera morrowi
 Prunus maritima
 Rhus species
 Ribes alpinum
 Rosa multiflora
 R. setigera
 Tamarix species
 Viburnum lantana

SHRUBS HAVING GOOD AUTUMN FOLIAGE COLOR

Shrub	Foliage Color
Aronia arbutifolia	red
Aronia melanocarpa	red
Berberis mentorensis	red
Berberis thunbergi	red
Cornus alba siberica	red
C. amomum	reddish-purple
C. florida	reddish-purple
C. racemosa	reddish-purple
C. stolonifera	red
Cotinus coggygia	red
Cotoneaster adpressa	red
C. divaricata	red
C. horizontalis	red
C. foveolata	red
Euonymus alatus	red
E. europeus	reddish-purple
Hamamelis vernalis	yellow
Hydrangea quercifolia	reddish-purple
Ligustrum obtusifolium regelianum	purple
Physocarpus opulifolius	yellow
Rhus aromatica	reddish-purple
R. copallina	red
R. glabra	red
R. typhina	red
Ribes odoratum	red
Rosa rugosa	red
R. setigera	red
Spiraea prunifolia	red
Syringa oblata dilatata	red
Viburnum carlesi	reddish-purple
V. dentatum	red
V. lantana	red
V. lentago	reddish
V. opulus	reddish-purple
V. tomentosum	red

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