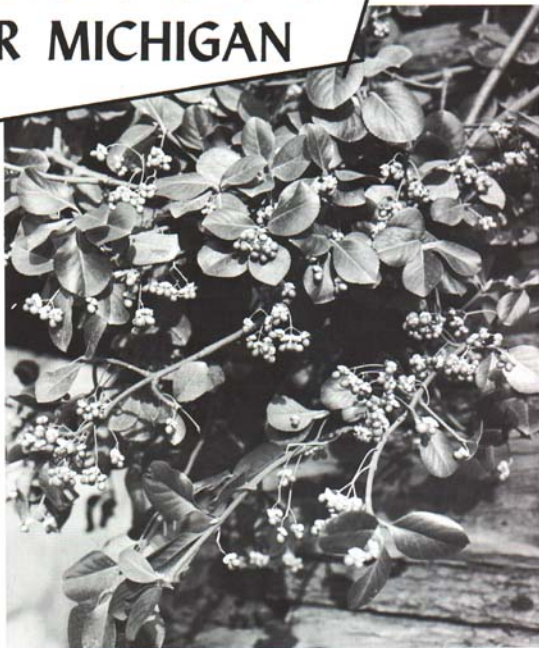


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ORNAMENTAL VINES FOR MICHIGAN

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Carl S. Gerlach



Bigleaf Wintercreeper

MICHIGAN STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE

Cooperative Extension Service • East Lansing



ORNAMENTAL VINES FOR MICHIGAN

By CARL S. GERLACH¹

This circular is one of a series on ornamental plant materials—trees, shrubs, and evergreens. It deals exclusively with vines for home plantings in Michigan. Only those vines are described which are of an ornamental nature and of value to the home owner for their foliage, their showy or fragrant flowers, their fruits, or their evergreen characteristics. Only those which are usually available from nurseries are mentioned. Omitted are those varieties which may be considered rarities or oddities, found chiefly in botanical collections, and those common native vines that offer little in an ornamental planting. Vines are of great value in certain aspects of landscape design, but often have been neglected because home owners failed to realize their potentialities. Now there is a trend to more structure in contemporary home gardens. And since vines lend themselves admirably to structure, there is a greater use for them. Vines can partially cover and blend the

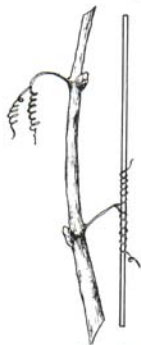


Fig. 1



Fig. 2

structure with other plantings. Some of these uses we will mention, but an ingenious designer will find the possibilities limited only by his imagination.

Certain vines with coarse foliage or dense habit of growth are useful on fences or arbors. These vines are also used for screening objectionable views, either permanently or temporarily, until other plantings are large enough to achieve the effect desired. They may be used to give shade and privacy to a porch or the open lattice structure over a patio. They will break the monotony of a long fence or stone wall, and they can be trained to form a definite pattern on a blank wall.

They are used in contemporary designs to soften the harsh lines of space dividers or baffles. On steep banks or under shade trees where grass can be grown only with difficulty, certain vines make fine ground covers. In areas where space is very limited, and high shrubs would require too much room, they can be used instead of shrubbery to achieve the effect of a narrow space divider or barrier.

The use to which a vine is to be put should be carefully considered before any selection is made. In some cases it might be desirable to cover an entire fence with a solid mass of foliage—hence a dense-foliage type would be used. To add pattern and interest to a stone wall without entirely covering it, a slower growing type with interesting leaves would be more desirable. A vine with fragrant flowers certainly should be considered for a porch or patio, or near a window which is frequently opened.

Vines are divided into three different types according to their method of climbing—whether by tendrils, twining or clinging. The kind of support to be provided will largely determine the type of vine to be selected. The grape is probably the best known of the vines which climb by means of tendrils. These are slim, flexible shoots (or, in some cases, leaflike parts which act as tendrils) which quickly wrap themselves about anything with which they come in contact to support the vine for further growth. (Fig. 1.) The twining vines climb by winding their stems around any available support (Fig. 2.) These two types are suited to climbing on

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wires, trellises or arbors. They can be grown on flat surfaces only if proper supports are provided for them.

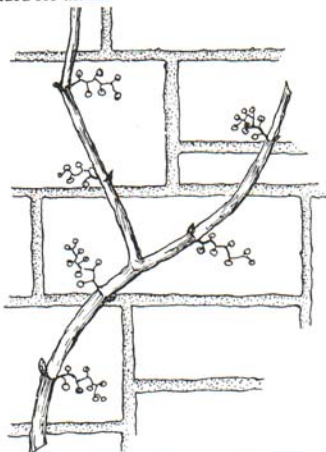


Fig. 3. Tendrils with disc-like adhesive tips support one type of clinging vine, such as Japanese Creeper.

The clinging vines are better adapted to climbing on even, vertical surfaces. These fall into two types. One, like the Japanese Creeper (*Parthenocissus tricuspidata*), climbs by means of tendrils with disc-like adhesive tips which attach themselves firmly to any surface—even glass. (Fig. 3.) The other type, like the English Ivy (*Hedera helix*) or Wintercreeper *Euonymus* (*Euonymus fortunei*), climb by means of small aerial rootlets, or holdfasts at intervals along the stems which dig themselves into the crevices of any rough-textured surface, like brick, and cling tightly. (Fig. 4.) When allowed to trail on the ground or climb in the joints of a dry-laid stone wall, they will root and form new plants.

Clinging vines are best used on brick or masonry walls. They should never be used on the walls of frame buildings; their very method of climbing might possibly damage the wood

of the structure. Also, they cling so closely to the wall that dampness is likely to collect under them and rot the wood. If, however, vines seem desirable in certain cases, the trellage on which they are trained should be far enough from the siding to allow air to circulate freely behind the vine. The trellage should be removable so that it may be laid flat on the ground to permit painting of the siding without damaging the vine.

Climbing roses are not true vines, since they have no method of support. However, they are often used as vines on structures, and are therefore included in this bulletin. Provided with proper support to which their stems are tied, they contribute colorful accents to the garden.

Supports of some kind are essential in growing vines, and must be sturdily constructed of durable materials and well-fastened. It is discouraging to see a beautiful, healthy vine ruined

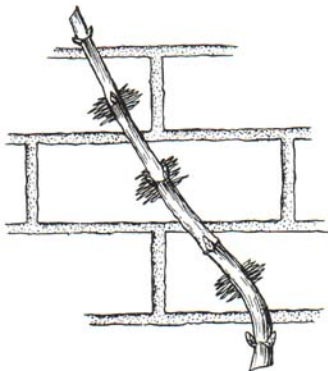


Fig. 4. Other clinging vines, such as English Ivy, climb by means of small aerial rootlets which dig into rough surfaces.

after several years' growth because the structure on which it is trained has collapsed. A little care and thought in building is well worth the time.



Fig. 5. *Baltic English Ivy*, trained on a wire frame to give an interesting pattern to a blank wall.

Many materials are suitable for vine supports; among them are wire, tubing, or wood, used alone or in combination. Wire and tubing should be of copper or aluminum which are not subject to rust. Wire fastened in a pattern of diamonds, or squares, or any other shape the designer wishes, makes a most attractive support for vines on a blank wall (Fig. 5). Wire or tubing used with a wooden frame makes a simple and interesting space divider or baffle in a garden, as well as a nice support for vines on an overhead structure in a patio. The possibilities for unusual effects and combinations are unlimited.

When wood is used, it should be of a durable kind like redwood or cypress. Wood should be treated with a preservative containing pentachlorophenol and, if color is desired, stained—not painted. Stains are available in almost any color to contrast or blend. Once applied they

are quite permanent, eliminating the necessity for periodic refinishing.

Before any particular vine is selected for a certain effect, a thought must be given to its care. The more delicate types generally used in patterns and on walls are usually slow growers. They will require only infrequent pruning and training to keep them in shape. The more rampant growers will soon present a very untidy appearance unless severely pruned at frequent intervals. The purpose for which the vine was planted should be kept firmly in mind, and the vine pruned so that it is kept within the bounds of that purpose. Only when a rustic planting or naturalistic effect is desired should a vine be allowed to grow at will.

Failure in growing vines is usually due to planting them where they are not at home. Some, like English Ivy, do better in shade. Some will do well in either shade or sun. But the flowering types must have full sunlight for successful bloom. Most vines require only a normal soil; some will tolerate adverse conditions; a few require special soil situations. The specific cultural requirements of each will be discussed more fully in the plant listings.

Not every vine discussed in this circular will grow in all parts of Michigan. Certain tender ones should be restricted to the southern part of the state. In the map (Fig. 6) Michigan is divided into four zones. The tender plants will grow in zone 1; hardy plants in zones 2 and 3; and only the very hardy plants in zone 4. There is, of course, some overlapping. Some plants listed for zone 1 might possibly, under certain conditions, grow in zone 2. Low, swampy lands, for instance, have frost sooner than highlands. The exposure, whether north or south, and the amount of winter protection a plant has will often be the determining factors in whether or not it grows in a colder zone.

A few vines having showy flowers may not be listed in the more northern zones, because the flower buds are killed by the severe winters. They may, however, produce good foliage and could be useful in that respect. This map is merely offered as a guide to aid in the selection of vines for your locality.



Fig. 6. Zones for ornamental vines. Refer to this map when considering the plants described in the following section.

Plants on the following pages are listed alphabetically by their botanical names. Those are according to the latest edition of *Standardized Plant Names*, an authority accepted by the nurserymen, botanical gardens, and arboreta. The common name is also given. The zones in which they grow and the height normally attained are mentioned. Their important characteristics from a landscape architectural standpoint are discussed, with the most important characteristic mentioned first and in capital letters. The information about each plant is

pertinent but brief. If a more detailed description is desired it would be well to consult an encyclopedia of horticulture or botanical reference.

Following the plant descriptions are lists of vines for special uses. These are intended as an aid in making selections for various purposes, but they are by no means limited to these uses. An ingenious designer will find many other interesting and unusual ways of using them.

PLANT NAMES AND DESCRIPTIONS

(Wherever a Zone Number is starred, it indicates that hardiness of the plant in that area of Michigan is questionable)

Actinidia arguta

30 ft. Zones 1, 2, 3* BOWER ACTINIDIA

FOLIAGE—Glossy, heart-shaped, rather large leaves (3 to 5 in. long) on conspicuous reddish petioles.

A vigorous and rapid-growing vine that climbs by twining stems. The flowers and fruits are of little ornamental value. It prefers a deep, rich, moist soil; but it will grow in average soils. Does well in either sun or partial shade. It is a clean, essentially pest-free vine which makes a dense screen; useful over fences, arbors and other treillage.

Akebia quinata

30 ft. Zones 1, 2, 3* FIVELEAF AKEBIA

FOLIAGE—Fine textured, very graceful, leathery leaves in clusters of five that remain green late into fall.

A dainty twining vine that will grow in any average soil in full sunlight or partial shade. The foliage is massed at the top, being naked and leggy at the base. Clusters of small, fragrant, violet-red flowers appear in mid-May. The fruit is a large, purplish, edible berry which is rarely produced. It may be used as a ground cover, on a fence or on other treillage where a dainty effect is desired.

***Ampelopsis brevipedunculata* (*A. heterophylla*)**

25 ft. Zones 1, 2, 3* AMUR AMPELOPSIS
(Porcelain berry)

FRUIT—Colorful clusters of berries in the fall that change from pale lilac to greenish to turquoise blue and blue-black.

A thrifty vine that climbs by twining tendrils. The foliage is three-lobed, somewhat like that of a grape. A moderate grower that will tolerate shade but flowers and fruits best in

full sunlight. It is one of the best fruiting vines; useful on fences, pergolas and rock walls.

VARIETIES—*A. b. maximowiczii* PORCELAIN AMPELOPSIS.

This is similar to the species except that the leaves are more deeply cut. Useful where a fine-textured foliage is desired.

***Aristolochia durior* (*A. sipho*)**

30 ft. Zones 1, 2, 3, 4* COMMON DUTCHMANSPIPE

FOLIAGE—Very large, dark green leaves sometimes as long as 12 in.

A vigorous twiner with small, brownish-purple flowers resembling a curved Meerschamp pipe that are hidden by the large heart-shaped leaves. It is a very rapid grower requiring plenty of room and a strong support. Grows



Fig. 7. The large leaves of the Common Dutchmanspipe make a dense screen.

well in either full sunlight or shade and in any average soil. A very popular vine, valued chiefly for its dense foliage. Useful when a fast, dense screen is required.

***Campsis radicans* (Bignonia r.)**

30 ft. Zones 1, 2, 3 COMMON TRUMPET-CREEPER (Trumpet Vine)

FLOWERS—Brilliant orange-scarlet, trumpet-like flowers that are very showy from mid-July through August.

A robust vine that clings to a surface by aerial rootlets and by twining, but it often requires additional support to hold it in place.



Fig. 8. The Common Trumpet Creeper is familiar in July and August.

The leaves are pinnately arranged, with 7 to 11 coarsely-toothed leaflets. Useful for rustic effects on fences or walls. Strong winds are apt to tear parts of the vine from structures so considerable pruning each spring is desirable.

Another trumpet creeper, *Campsis tagliabuana* Madame Galen, has larger and showier flowers, but it is not so hardy as the Common Trumpet Creeper. It would, therefore, be more desirable in the more southern parts of the state. Both trumpet creepers are quite tolerant as to soil conditions and grow well in full sun or partial shade.

Celastrus orbiculatus

35 ft. Zones 1, 2, 3 ORIENTAL BITTERSWEET

FRUIT—Clusters of yellow capsules which split open revealing orange-red fleshy berries inside. They appear in the fall and persist into early winter.

A vigorous grower which climbs by twining stems covering banks, walls, fences, always reaching upward for light. This vine is the oriental counterpart of our native Bittersweet (*Celastrus scandens*).

The fruit of the Oriental Bittersweet is borne in lateral clusters, while on the native species it is borne in terminal clusters. All bittersweet species have staminate flowers on one plant and the pistillate (fruit bearing) flowers on another. At least one of the male flowering plants should be planted for each five of the female (fruit bearing) plants to insure fruiting effects.



Fig. 9. The showy flowers of the Madame Galen Trumpet Creeper.

Celastrus scandens

30 ft. Zones 1, 2, 3, 4 AMERICAN BITTERSWEET

FRUIT—Terminal clusters of yellow capsules (on female plants only) first appearing in early autumn and then splitting open revealing the bright orange-red berries.

Climbing by twining stems, covering fences, banks and other plants, this vine has many uses. The foliage is not as dense as the Oriental species (*C. orbiculatus*). However, the terminal fruit clusters are more conspicuous and persist most of the winter.

Of the native vines, it is probably one of the best for fruit and most useful for covering fences and other treillage. It is native along streams and in thickets.

Clematis jackmani

12 ft. Zones 1, 2 JACKMAN CLEMATIS

FLOWER—Very large, showy, violet-purple flowers, 4-6 in. in diameter, blooming in July.

It climbs by twining stems and by twining petioles which cling to wire fences or even branches of other plants. The foliage is a dull green, of medium texture and massed at the top leaving the base of the vine naked. It requires a rich, moist, alkaline soil, sunlight for the top and shade for the base (root area). A refined vine that is valued for the exotic flowers. Useful as an accent plant on treillage.

VARIETIES—

C. j. Gypsyqueen — Flowers dark velvety purple.

C. j. Madame Edouard Andre' — Flowers purplish red.

C. j. Mrs. Cholmondeley — Flowers light blue.

Some of the other large flowering species like *C. montana rubens* and *C. lanuginosa* hybrids have been grown with fair success in the southern part of the state.



Fig. 10. The flowers of the Jackman Clematis are violet-purple and 4 to 6 inches in diameter.

Clematis paniculata

30 ft. Zones 1, 2, 3* SWEETAUTUMN CLEMATIS

FLOWERS—As the common name suggests, this vine's chief asset is the small, very fragrant white flowers which are produced in great abundance in late August and September.

FRUIT—The plume-like silvery seed heads in billowy masses are also attractive after the flowers have gone.

Climbing by twining stems and petioles, it is useful anywhere a vine may be needed. Requires the same moist alkaline loam as do all Clematis. Prefers full sunlight but will do well in some shade.

Clematis virginiana

15 ft. Zones 1, 2, 3, 4* VIRGINSBOWER

FLOWERS—Somewhat similar to the Sweetautumn Clematis (*C. paniculata*) except that its flowers are not fragrant and appear earlier—from the middle of June to July.

FRUITS—Grayish plume-like heads follow the flowers adding another note of interest.

Climbs by twining stems and petioles. A native vine that has been replaced by the Japanese species (*C. paniculata*).

***Euonymus fortunei* varieties (*E. radicans* acutus)**

Zones 1, 2, 3 WINTERCREEPER EUONYMUS
(u-on'-e-mus)

The wintercreepers, hardiest of the evergreen vines, are valued chiefly for their evergreen foliage. However, a few also have colorful bittersweet-like fruits in the fall. The flowers are small, greenish-white and inconspicuous. They climb by aerial rootlets, are quite tolerant as to type of soils, and grow well in shade or sunlight. The foliage, however, is better when shaded from the winter sun.

The varieties comprise a most valuable group of vines. Useful as ground covers, trained against walls, as low shrubs, climbing over low walls and banks and even climbing on tree trunks.

VARIETIES—

E. f. carrierei 20 ft. GLOSSY WINTERCREEPER EUONYMUS

A large growing type (mature form) with glossy green, rather large leaves up to 2 in. long. It climbs well if a support, such as wires or other trellage, is provided; or it will mound into a bushy shrub about 3 ft. high. This is one of the varieties that produces the showy bittersweet-like fruits.

E. f. coloratus 20 ft. PURPLELEAF WINTERCREEPER EUONYMUS

The foliage is quite similar to the Glossy Wintercreeper Euonymus except that it is not as glossy. In the fall the leaves turn purplish-red, remaining that color all winter. Used the same way as the previous variety. Also good if combined with other evergreens for color contrast in the winter. The fastest grower of the Wintercreepers and the easiest to propagate, especially by layering.

E. f. minimus 5 ft. BABY WINTERCREEPER EUONYMUS

A dwarf variety having very small leaves (1/2 in. long). A very slow grower, useful as a ground cover or on a wall where a small space is to be covered. Another dwarf variety is *E. f. kewensis*, which supposedly has even smaller

leaves. These two varieties are seldom offered by nurseries because of their slow growth.

E. f. radicans 10 ft. COMMON WINTERCREEPER EUONYMUS

An intermediate form that climbs or trails making an ideal ground cover plant. The leaves are about 1 in. long, a good green color in summer and turning darker with a purplish underside in the winter. Makes an excellent evergreen ground cover.

E. f. vegetus (*E. f. vegeta*) 20 ft. BIGLEAF WINTERCREEPER EUONYMUS

The most popular and ornamental of the Wintercreepers. The leaves are round, 1 1/2 in. long, quite thick and leathery. Climbs on a wall or other support, or mounds into a nice shrub form if pruned. Also makes a very effective ground cover under small flowering trees. The best variety for fruiting effects. The pinkish capsules split open showing the orange seeds. Some persons have referred to this vine as the "Evergreen Bittersweet" because of the colorful fruits.

NOTE: Only the *carrierei* and *vegetus* varieties develop the showy fruits. Another Euonymus, *Euonymus kiautschovicus* (*E. patens*) the Spreading Euonymus resembles some of the above varieties in the summer and is often mistaken for the Wintercreepers. They are easily distinguished in the winter, because the Spreading Euonymus loses its leaves and the Wintercreepers keep them all winter long.

Hedera helix baltica

20 ft. Zones 1, 2* BALTIC ENGLISH IVY

FOLIAGE—Rich, dark shining evergreen leaves, 2-5 lobed, 1-3 in. long. The foliage color is good all winter if protected from winter sun.

A handsome vine, climbing by aerial rootlets to make a dense mass of green on a wall. Can be trained on trellage or allowed to trail on the ground, making an excellent carpet. Flowers and fruits are not ornamental, appearing on mature growth only, which is almost never in Michigan.

It is not fully hardy in Michigan except in the southern part of the state. Where it is hardy, however, it is easy to grow and makes an excellent evergreen vine. Needs protection so it does best on the north side of a building or under shrubbery. Does well in a variety of soils.

Another variety, the Bulgarian English Ivy (*H. h. bulgaria*) has been grown in East Lansing for a few years and apparently is as hardy as the Baltic strain.



Fig. 11. The orange flowers of the Trumpet Honeysuckle, native to some parts of Michigan.

Hydrangea petiolaris

40-50 ft. Zones 1, 2 CLIMBING HYDRANGEA

FLOWERS—White, small in large flat clusters (6-10 in. in diameter) with the outer ring being showy, four-parted, sterile flowers. Blooms in mid-June. Should be grown in full sunlight for best flowering effect.

A rather coarse, high-climbing vine which climbs by aerial rootlets. The foliage is clean, rather large and bright green. This vine stands considerable shade but produces few flowers unless planted in a sunny place. A slow starter but a rapid grower after it has been established. Becomes a low bushy shrub if no support is available. A good flowering vine that has been neglected in landscape plantings.

Lonicera japonica halliana

20 ft. Zones 1, 2, 3 HALLS JAPANESE HONEYSUCKLE

FLOWERS—Very fragrant white, trumpet-shaped flowers that turn yellow before dropping off. Showy in mid-June. Black fruits in the fall are of no value.

FOLIAGE—Semi-evergreen foliage that appears early in the spring and hangs on well into the winter.

A handsome vine climbing by twining stems. Grows well in sun or shade and is fairly tolerant of any garden soil. In Michigan, it is occasionally damaged by winter freezes but farther south it grows so vigorously that it is considered a pest. Useful as a ground cover or on a treillage. Valued for the fragrant flowers and long foliage season. A native vine of Japan that has escaped from cultivation and become widely naturalized in America, especially in the southern states.

Lonicera sempervirens

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

FLOWERS—Very showy, terminal clusters of orange to scarlet trumpet-shaped flowers that bloom from mid-June to August.

A twining vine that is native to some parts of Michigan. Foliage is a bluish-green but not as handsome as the Hall's Japanese Honeysuckle (*L. japonica halliana*), being occasionally troubled by plant lice. Fruit is a juicy orange-red berry readily eaten by birds. Useful as ground cover, on low walls and fences. Although hardier and showier in flower than Hall's Japanese Honeysuckle, it is not so useful in landscape plantings.

***Parthenocissus quinquefolia* (Ampelopsis q.)**

40-50 ft. Zones 1, 2, 3, 4 VIRGINIA CREEPER (Woodbine)

FOLIAGE—Five-parted leaves that turn brilliant scarlet and crimson in autumn.

A vigorous vine climbing by tendrils ending in adhesive discs that adhere to brick, stone, tree trunks or any surface that will provide a support. Grows in any type of soil in sun or shade. Flowers are small, greenish and ineffective. Fruits are bluish-black, slightly bloomy berries in clusters. Useful vine on rustic structures or as a ground cover.

VARIETIES—*P. q. engelmanni* ENGELMANN
VIRGINIA CREEPER

A more refined vine having smaller leaflets and not as rampant in growth. More desirable than the regular species above.

***Parthenocissus tricuspidata* (*Ampelopsis t.*)**

50-60 ft. Zones 1, 2, 3 JAPANESE CREEPER
(Boston Ivy)

FOLIAGE—Lustrous green leaves that turn brilliant tones of scarlet, orange and purple in autumn.

One of the best vines for stone work. Climbing by tendrils having adhesive discs at the tips. Very tolerant as to type of soil; growing in full sunlight or in the shade. Flowers are inconspicuous but the fruit is fairly showy, being bluish-black berries covered with a bloom resembling a cluster of small grapes. A better vine for masonry buildings than the Virginia Creeper.



Fig. 12. Japanese Creeper climbing on a brick building.



Fig. 13. Veitch Japanese Creeper climbing on masonry building.

VARIETIES—

P. t. lowi LOW'S JAPANESE CREEPER

The leaves are much smaller, frilled and purplish when young. Not as hardy and less vigorous than species, seldom attaining a height over 10 ft.

P. t. veitchi VEITCH JAPANESE CREEPER

The leaves are smaller, offering a more refined foliage display. Recommended in preference to the species.

Polygonum auberti

25 ft. Zones 1, 2, 3 SILVERVINE FLEECE-FLOWER (Silver-lace Vine)

FLOWER—Masses of small, white or greenish-white flowers in slender axillary clusters. Produced in late summer; August and September.

A vigorous, twining vine that may grow as much as 20 ft. in a season. Foliage is dense and bright green. Valued for late bloom and rapid growth. Because of the rank annual growth, it is best if kept in bounds by heavy pruning each spring.

Rosa (climbers)

6-15 ft. Zones 1, 2, 3, 4* RAMBLER ROSE

FLOWERS— Clusters of showy single or double flowers in June. White, yellow, pink and red.

The roses are not true vines as they do not twine or cling to structures. Their long canes must be tied to the supports. Some species like the Japanese Rose (*Rosa multiflora*) will mound up to make a thicket shrub. Most of the rambler hybrids, when used on pillars or other treillage, make very colorful accents in the garden. They need annual pruning and



Fig. 14. New Dawn Rose trained on a post and used as an accent in the garden.

should be sprayed and fertilized periodically. They are valued for their attractive flowers and can contribute much to a garden.



Fig. 15. Rambler Roses used on a fence.

The following table lists a few of the important varieties:

NAME	FLOWERS	COLOR
BLAZE	semi-double	scarlet
DR. W. VAN FLEET	double	pink
DOUBLOONS	double	yellow
FLORADORA (climber)	double	red
KING MIDAS	double	yellow
MME. GREGOIRE		
STAEHELIN	double	pink
NEW DAWN	double	pink
PAUL'S SCARLET (climber)	semi-double	scarlet
SILVER MOON	semi-double	white

Vitis species

Zones 1, 2, 3, 4

GRAPES

The grapes are rapid growing vines, climbing by means of tendrils. The native species like the Summer Grape (*V. aestivalis*) and the Riverbank Grape (*V. riparia*) are seldom used for ornamental purposes. In naturalistic areas, however, such as rural parks they have been used to cover rustic structures or fences; as rapid growing screens; and as ground covers to control erosion.

The domestic grapes,¹ a great many varieties of which are offered by the nurseries, are

¹See Extension Folder P-71, "Grapes in the Home Fruit Garden."

grown chiefly for their fruits. They may also be used on fences or arbors for ornamental effects as well as fruit production. Grape arbors in rural areas provide nice shady retreats as well as juicy grapes for the table, jelly or wine.

***Wistaria floribunda* (Wisteria f.)**

25 ft. Zones 1, 2, 3* JAPANESE WISTARIA

FLOWERS—Violet-blue, pea-like flowers in pendant clusters, as much as 12 in. or more in length. Very showy in late May.

A vigorous vine that climbs by twining stems, sometimes developing a twisted trunk several inches in diameter. The pinnately compound foliage (13-19 leaflets) is a bright green color, rather densely arranged, making a good screen. The bean-like fruit pods hang on after the foliage drops in the fall.

It prefers a good deep, rich soil and grows well in either shade or sun. However, it needs sunlight for best flowering effects. Valued for the very showy flowers and the clean foliage. It is useful on overhead treillage or trained on arbors. There are many varieties available, with flowers varying in color from white to deep reddish purple.

***Wistaria sinensis* (Wisteria chinensis)**

25 ft. Zone 1, 2, 3* CHINESE WISTARIA

FLOWERS—Violet-blue, pea-like, slightly fragrant flowers in pendant clusters 6"-12" long. Showy in May. All the flowers open at the same time, making a better display than those of the Japanese Wistaria which open gradually from the base to the tip.

A rapid growing vine, climbing by twining stems. The pinnately compound foliage (7-13 leaflets) is a bright green and makes a good dense screen. It requires the same growing conditions as the Japanese Wistaria and is used in the same manner.

VARIETIES—*Wistaria sinensis alba*

The flowers are white and quite fragrant.

The Chinese Wistaria is more easily obtained from nurseries although it is supposedly



Fig. 16. The colorful pendulous racemes of the Chinese Wistaria.

less hardy than the Japanese Wistaria. It is, however, a faster grower and therefore easier to establish in a planting. Flower clusters are shorter and less apt to be damaged by winds.

Sometimes wistaria vines may be several years old without ever having produced flowers; or they may fail to bloom for several seasons even though they have bloomed earlier. In northern regions, the flower buds may have been damaged by severe winter weather. In other cases, the flower buds were never formed during the previous season, and other remedial measures should be tried.

Severe pruning of the new growth in late spring or early summer or root pruning by cutting some of the roots a few feet from the trunk will force the vine into flower. Heavy applications of super phosphate fertilizer has also been known to help bring wistarias into bloom. This treatment should be done in early spring since the flower buds for the following season are formed in the early summer.

VINES FOR SPECIAL PURPOSES

Vines with Attractive Flowers

- Campsis radicans*—orange scarlet, mid-July through August
Campsis tagliabuana Mme. Galen—deep orange, mid-July through August
Clematis jackmani—violet-purple, July
Clematis paniculata—white, August, September
Clematis virginiana—white, June, July
Hydrangea petiolaris—white, June
Lonicera japonica halleana—white, June
Lonicera sempervirens—orange-scarlet, June to August
Polygonum auberti—white, August, September
Rosa (climbers)—white, pink, red, yellow, June
Wistaria floribunda—violet-blue, late May
Wistaria sinensis—violet-blue, late May

Vines with Attractive Fruits

- Ampelopsis brevipedunculata*—pale lilac to porcelain blue
Celastrus orbiculatus—yellow orange
Celastrus scandens—yellow orange
Clematis paniculata—silvery white
Clematis virginiana—grayish white
Euonymus fortunei carrierei—pinkish orange
Euonymus fortunei vegetus—pinkish orange

Vines with Attractive Fall Foliage

- Celastrus orbiculatus*—yellow
Celastrus scandens—yellow
Euonymus fortunei coloratus—purple
Parthenocissus quinquefolia—orange to scarlet
Parthenocissus tricuspidata—orange to scarlet
Vitis coignetiae—scarlet

Vines with Evergreen Foliage

- Euonymus fortunei* and varieties
Hedera helix baltica
Lonicera japonica halliana (semi-evergreen)

Vines Withstanding Shade

- Actinidia arguta*
Akebia quinata
Aristolochia durior
Clematis paniculata
Clematis virginiana
Euonymus fortunei and varieties
Hedera helix baltica
Hydrangea petiolaris
Lonicera japonica halliana
Lonicera sempervirens
Parthenocissus quinquefolia
Parthenocissus tricuspidata
Vitis species

Vines Withstanding Wet Soils

- Campsis radicans*
Clematis virginiana

Vines Withstanding Dry Soil Conditions

- Ampelopsis brevipedunculata*
Campsis radicans
Campsis tagliabuana Mme. Galen
Lonicera japonica halliana
Lonicera sempervirens
Parthenocissus quinquefolia
Parthenocissus tricuspidata
Polygonum auberti

Vines for Ground Covers

- Akebia quinata*
Celastrus orbiculatus
Celastrus scandens
Euonymus fortunei and varieties
Hedera helix baltica
Lonicera japonica halliana
Vitis species

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