

Department of Horticulture

Purdue University Cooperative Extension Service • West Lafayette, IN

Annual and Perennial Vines

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Vines add versatility to any landscape. They can be used to break the bareness of long walls, soften posts, frame doors and windows, and beautify window boxes. With a fence or trellis, they can be used for screens, making a background for your flower garden or quickly turning an ordinary porch or patio into a private, shady living center. Some slower growing vines are useful as container plants for patios.

On the down side, most vine species have the potential to become invasive, spreading to areas where they may not be desirable or becoming too large for the intended area. Careful selection and maintenance of the planting will help prevent them from becoming a problem. For more information on invasive plants, see the web sites listed at the end of this publication.

Types

Vines are characterized as three types based on how they cling to a support. The kind of support needed depends on whether the vine clings by twining stems, or by specialized structures such as tendrils, adhesive disks, and aerial roots.

Vines with twining stems wind around a support as they grow (Figure 2). Examples of plant with twining stems include bittersweet, wisteria and trumpet creeper.

Tendrils resemble threadlike stems that wrap around any structure they contact (Figure 1). Examples of plants with



Figure 1.
Twining vines climb by winding their stems around any available support.

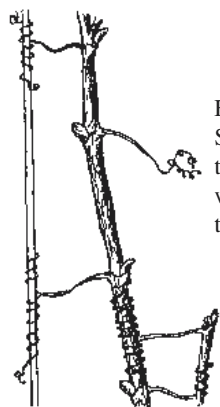


Figure 2.
Some vines have tendrils that wrap around any type of support.

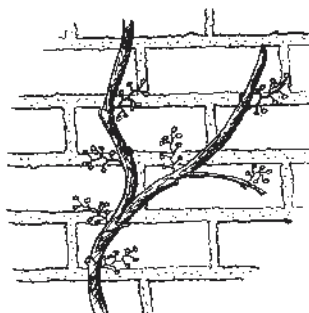


Figure 3.
Some clinging vines climb by means of tendrils with disklike adhesive tips that attach to any surface.

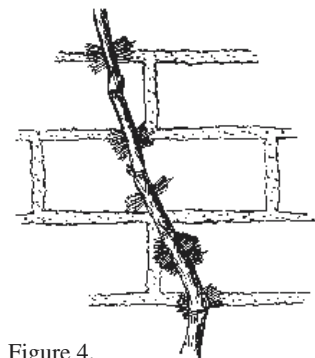


Figure 4.
Other clinging vines attach themselves to surfaces with small aerial rootlets along the stem.

tendrils include grape, pea, and cucumbers.

Some vines have specialized structures for clinging to a support with a disk-like "suction cup" (Figure 3). Examples include Boston ivy and Virginia creeper.

Other vines cling by means of small, aerial roots that attach to rough surfaces such as mortar, wood, and tree trunks (Figure 4). Examples include English ivy, trumpet creeper, and wintercreeper euonymus.

Supports

Vines that climb by means of twining stems or tendrils will need to be supported by wires, trellises, or arbors. Vines that cling either by adhesive disks or aerial roots can be grown on either brick or stone walls but should NOT be used on wood framed structures due to the risk of structural damage. Clinging vines tend to collect moisture leading to wood decay. Provide a trellis or similar support far enough away from a wood structure to allow proper ventilation.

Support structures for vines should be made from durable materials such as metal or wood. When using metal wire or tubing, copper or aluminum are preferred over other metals to avoid rusting. For wood structures, naturally rot-resistant woods such as redwood, cedar, or cypress are the most durable. Treated lumber and synthetic lumber made from recycled plastic provide additional durable options.

*Figures used by permission from University of Missouri Extension publication G6840 *Selecting Landscape Plants: Ornamental Vines*, by Dr. Christopher J. Starbuck.

Annual Vines

Annual vines are those which must be sown from seed every year. Relatively inexpensive, most types bloom or have attractive foliage all summer. You can change the planting each year to vary the color and foliage characteristics.

Sow seeds indoors for an early start. Most annual vines do not transplant easily, so sow the seed directly into the pot. See HO-14 for more information on starting seeds indoors.

Selected Annual Species:

Balloon Vine** (*Cardiospermum halicacabum*). The small white blooms are rather inconspicuous. Fruits (seed pods) look like an inflated green balloon. The seed pods are highly decorative on the vine, or they can be cut and used for flower arrangements. The vine produces a feathery and delicate growth. It is best used on a small support or as a container-grown plant. It climbs by tendrils.

Black-eyed Susan Vine, Clockvine (*Thunbergia alata*). Small, bright orange blooms with jet black centers are produced in great profusion on this dainty vine. Vines can be grown on a small, erect support or in a container. Tendrils may hang downward, so provide some type of support.

Cardinal Climber (*Ipomoea x multifida*, *I. sloteri*). Produces red blooms with yellow throats. The foliage is feathery, giving the vine a delicate appearance. The plant is ideal for patio containers. *Ipomoea quamoclit*, or cypress vine, is similar but produces small, phlox-shaped, red blooms.

Cup and Saucer Vine (*Cobaea scandens*). Also called Cathedral Bells, produces cup-shaped blooms of pure white or lilac on a heavy-growing vine. It climbs by means of twining stems.

Gloxinia, Climbing (*Asarina erubescens*, *Lophospermum erubescens*). The flowers resemble miniature gloxinia blooms in colors of white, velvety purple and rose. Ideal for a container plant with a support needed, it also grows well in hanging baskets.

Hyacinth Bean (*Dolichos lablab*, *Lablab purpureus*). The pea-like blooms of either white or purple are simultaneously borne on one plant. The purplish, decorative seed pods follow. The foliage is also pea-like and the vines make an excellent screen. Stems twine on supports.

Moonflower Vine (*Ipomoea alba*). Similar to a morning glory, this vine produces extra-large and pure white

blooms which usually appear only in late afternoon or early evening. An interesting effect can be created by interplanting with common morning glory.

Morning Glory** (*Ipomoea tricolor*, *I. purpurea*, and hybrids). Vines are available in single or double flowered types in red, blue, white, rose, purple, or two-toned colors. Vines grow rapidly in warm soil and sunlight and need a sturdy support. They can also be used for non-traffic ground cover areas. Select from named cultivars.

Scarlet Runner Bean (*Phaseolus coccineus*). This vine produces typical bean foliage and flowers, and the fruits are green pods. It grows fast and the twining vines need ample support. It's ideal for screening.

Sweet Pea (*Lathyrus odoratus*). Known for their delicate, fragrant flowers in a rainbow of colors, sweet peas need full sun for best growth. Select the tall-growing or vining types, and those called heat resistant. Provide support.

Sweet Potato, Ornamental (*Ipomoea batatas*). Ornamental sweet potatoes grown for their foliage are relatively new to the horticultural market. Sweet potatoes are warm season plants, heat tolerant, and adapt well to growing on trellises or in hanging baskets and other garden containers. Currently available cultivars offer foliage in dark purple, bright chartreuse green, and a tricolor blend of green, pink and white. They are usually grown as annuals in Indiana, though the tuberous roots could be stored over winter and replanted in spring.

Perennial Vines

Perennial vines usually are best started similarly to other woody ornamental trees and shrubs. Set 8 to 12 inches from the desired support. Follow basic planting instructions for ornamental plants (see HO-100 for more information). Dig the hole 6 inches deeper and 12 inches wider than the root spread of the vine. Add soil and set the plant at the original soil level. Use a planting mixture of 2 parts soil to 1 part peat moss. Settle by watering, and mulch with a 2-inch layer of peat moss or bark chips.

Fertilize perennial vines sparingly in the late fall or early spring. Use 1/4 cup of a general analysis fertilizer such as 12-12-12 or 16-8-8 per plant. Be sure to water it in thoroughly.

Selected Perennial Species:

Akebia, Fiveleaf (*Akebia quinata*). This dense, fine-textured twining vine grows rapidly. Small purple flowers are produced in clusters during May. The fleshy pod-like fruits are interesting and conspicuous, but seldom produced. This is one of the neatest and easiest foliage vines to train around a wire or waterspout.

Bittersweet, American (*Celastrus scandens*). This is one of the most ornamental twining vines. Staminate (male) and pistillate (female) flowers are produced on separate plants, so plant at least one male plant for adequate pollination. The yellow capsules open to reveal scarlet red seeds and remain attached all winter.

Bittersweet, Oriental (*Celastrus orbiculatus*). This is the Oriental counterpart of our native bittersweet. The leaves are more rounded and the fruits are produced in small lateral clusters, not terminal clusters, like the native species. Staminate (male) and pistillate (female) flowers are produced on separate plants. The fruit is a yellow capsule which splits and exposes the red, fleshy seed.

Boston ivy or Japanese Creeper (*Parthenocissus tricuspidata*). This clinging vine climbs by tendrils with adhesive discs. It climbs rapidly and densely, even under trying city conditions. It produces a scarlet fall color. Small-leaved varieties are available.

Clematis (*Clematis* sp.). There are many species and cultivars available, with new hybrids being introduced yearly. All climb by twisting the petioles and all prefer a light loamy soil. Ample soil moisture and a cool soil are important, thus mulching is beneficial. Also, deep preparation of the planting site is beneficial. Vigorous-growing species need little pruning, although cold winters often kill the above-ground portions of some hybrids. Select for flower color and size. Many also produce plummy white seed heads. Also determine if the vine flowers on previous year's or current season's wood. If the vine produces flowers on the previous season's wood, spring pruning may remove much of the flower show.

A few popular species include:

Jackman Clematis (*Clematis x jackmannii*) large violet-purple flowers in mid-July.

Big Petal Clematis (*Clematis macropetala*) azure blue, large flowers in the spring.

Sweet Autumn Clematis (*Clematis terniflora*, formerly *maximowicziana*) white, very fragrant flowers in late August.

Scarlet Clematis (*Clematis texensis*) bright scarlet, bell-shaped flowers in July.

Virgin's Bower (*Clematis virginiana*) small, white flower in late August. Use for wild or wooded gardens.

Dutchman's Pipe (*Aristolochia macrophylla*). This vigorous twining vine produces large leaves, sometimes 12 inches long, giving it a coarse texture. The inconspicuous flowers are almost hidden by the leaves, but do resemble a small, curved Meerscham pipe. It is ideal where a large-leaved, vigorous vine is desirable.

English Ivy (*Hedera helix*). This dark green vine climbs by aerial rootlets. Mature types will produce a black

berry. Many named types are available, but all need some type of winter protection as they usually brown off quite badly.

Gloryvine (*Vitis coignetiae*). This rapid grower with red fruit and red fall color is one of the parents of most of the American hybrid grapes. Choose hybrids according to fruit desired.

Grapes (*Vitis* sp.). Climbing by tendrils, grapes are dual purpose vines for both screening and fruit production. Having large leaves, they are rather coarse in appearance. Choose types which produce both attractive fruit and foliage.

Hydrangea, Climbing (*Hydrangea anomala* subsp. *petiolaris*). This outstanding climbing deciduous vine climbs by aerial rootlets. The white flowers are produced in clusters in mid-June. The reddish shredding bark on older stems is of interest in wintertime. Use on brick walls, old walls, or stone piles.

Kiwi, Hardy (*Actinidia arguta*). An ideal screening twining vine useful for its dense foliage. The glossy, green, heart-shaped leaf blades contrast with the colorful red petioles. Flowers and fruits are inconspicuous.

Passion Flower (*Passiflora* sp.). Many variants are available in a wide selection of flower types. Plant in sunny but wind-protected spots. Provide a sturdy support. Summer mulches keep the roots cool and moist. In some areas, certain varieties will be killed to the ground but will send up new vines each year, thus behaving as an herbaceous perennial.

Porcelain Ampelopsis, Porcelain Ivy (*Ampelopsis brevipedunculata*). Climbing by tendrils, this vigorous vine has deeply lobed leaves and colorful berries about 1/4 inch in diameter. Produced in clusters, the berries are colored green, yellow, white and porcelain blue, all in the same cluster.

Rose, Rambler, Climbing (*Rosa* sp.). A large number of hybrid roses are available. Most need support. Regular pruning and other cultural care, similar to garden roses, is necessary. Select for flower color, growing habits, and hardiness.

Silver Fleecevine (*Polygonum aubertii*, *Fallopia aubertii*). This vine produces a dense and bright green foliage and profuse, small, greenish-white flower clusters in August. It is a vigorous grower (often 20-30 feet per year).

Trumpet Vine (Creeper) (*Campsis radicans*). This shrubby vine climbs poorly by aerial rootlets, but may need additional support since it becomes quite heavy. Its brilliant orange-scarlet midsummer flowers are its chief attraction. 'Madame Galen' is a large-flowered hybrid.

Wintercreeper Euonymus (*Euonymus fortunei*). This vine produces aerial footlets to become a climbing vine on low walls and fences. It can also be used as a ground cover. Choose from many varieties and cultivars for different effects.

Wisteria, Chinese (*Wisteria sinensis*). This strong-growing, twining vine produces blue-violet, slightly fragrant flower clusters 7 to 12 inches long in late May. The flower clusters are dense and compact, giving a beautiful flower show. This species characteristically has 7 to 13 leaflets compared to 13 to 19 for the Japanese Wisteria.

Wisteria, Kentucky (*Wisteria frutescens*, var. *macrostachys*). The lilac-purple flowers are produced in flower clusters up to 10 inches long. It blooms later than the other species, in early June.

Wisteria, Japanese (*Wisteria floribunda*). This vine produces flower clusters 12 to 36 inches long of fragrant violet to violet-blue flowers in late May. Flowers open progressively. Many varieties have been carefully selected for color and are asexually propagated. Root pruning and applications of superphosphate seem to encourage bloom. This is reputedly more hardy than Chinese Wisteria (*W. sinensis*).

Related Publications

HO-14 Starting Seeds Indoors

HO-100 Planting and Transplanting Landscape Trees and Shrubs

**Figures used by permission from University of Missouri Extension publication G6840 Selecting Landscape Plants: Ornamental Vines, by Dr. Christopher J. Starbuck.*

**Although this plant is sold as an ornamental vine, in some states it is considered a noxious weed and thus is banned from sale in those states. For more information on invasive plants and noxious weeds in your state, please see the following web sites:

Indiana Department of Natural Resources Invasive Plants
<http://www.state.in.us/dnr/entomolo/pestinfo/invasive.htm>

Federal Invasive Plant List
<http://www.invasivespecies.gov/profiles/main.shtml>

Federal Noxious Weed List
<http://www.aphis.usda.gov/ppq/permits/fnwsbycat-e.PDF>

For more information on the subject discussed in this publication, consult your local office of the Purdue University Cooperative Extension Service.
