

An Introduction to Clematis

Clematis are of the *Ranunculaceae* botanical family. Most *Clematis* are climbers. Two notable exceptions are the species *C. heracleifolia* and *C. integrifolia*, which are herbaceous and fit well in a perennial garden border. There are nearly 300 species of *Clematis* worldwide. The vast majority of these are very hardy; some species, however – particularly the evergreens, can only take a few degrees of frost.

Clematis enable the gardener to have masses of bloom from late winter to late fall. To accomplish this, varieties with different bloom times can be grown together or planted in complimentary areas of the garden.

Clematis can be chosen to enrich any garden, no matter how large or small. Some of the species, if left to wander, will easily grow 30' (9m), while others mature at 6-8' (2m). Hybrids are, on the whole, more compact with the majority maturing in the 8-12' (2.5-3.5m) range.

Most *Clematis* varieties produce single flowers. These range in size from as small as 1" (2.5cm) to as large as 10" (25cm). Some varieties produce double flowers; others produce both single and double flowers. Most double-flowering varieties will bloom double on the previous season's growth, early in spring. They will then bloom single on the current season's growth in late summer or early fall. If pruned improperly, these varieties may produce single blooms only.

Clematis blossoms often change color – some very markedly – through the life of each flower, particularly when grown in full sun. Pastel colors will hold their color best if grown in some shade. After the flowers are finished, the very attractive seed heads stay on the plant and can make a welcome addition to most flower arrangements. If left on the plant, they sometimes remain well into winter.

Many *Clematis* species are scented, although none are strongly perfumed. Even though the scent is not powerful, a mass of blooms can fill the air with fragrance. The most-highly-scented is the tender species *C. armandii*. *Montana* types can also be relatively aromatic, often with a scent reminiscent of vanilla. Of the large flowering hybrids, 'Fair Rosamund' is the only one with any noticeable scent.

Clematis have some specific climate-related requirements. *Clematis* grow and bloom much better if they have a dormant period of approximately six weeks. Night temperatures of about 45°F (7.5°C) or colder for a week or more seems to put them into dormancy. Gardeners should be aware that most of the excellent books on *Clematis* originate in England, where climatic conditions are quite different from those in most of North America.

Clematis for Partial Shade and North Walls

Most *Clematis* require at least a half day of sun or strong filtered light to bloom well. Gardeners living in warm weather states such as California that have long growing seasons and hot temperatures can plant most *Clematis* in a partial shade aspect. Those living in colder climates with a shorter growing season, however, need to adhere more closely to the following recommendations:

Alabast	Lady Northcliffe
<i>alpina</i> cultivars	Lasurstern
Asao	Lemon Chiffon
Bee's Jubilee	<i>macropetala</i> cultivars
Bella	Madame Edouard André
The Bride	Marie Boisselot
<i>cartmanii</i> Joe	<i>montana</i> cultivars
Comtesse de Bouchaud	Moonlight
Daniel Deronda	Mrs. Cholmondeley
Dr. Ruppel	Multi-Blue
Edith	Nelly Moser
Elsa Spath	Perle d'Azur
<i>florida</i> Plena	Pink Champagne
<i>florida</i> Sieboldiana	Prince Charles
<i>forsteri</i>	Roko Kolla
General Sikorski	Silver Moon
Henryi	The President
H.F. Young	Victoria
x <i>jouiniana</i> Praecox	<i>viticella</i> cultivars
Ken Donson	Will Goodwin

Planting Your Clematis

When

Whenever the ground is workable, *Clematis* can be planted. *Clematis* react to the seasons much like bulbs. In the summer and fall there is vigorous root growth, storing energy for top growth and flowers the following spring. Come spring, *Clematis* will produce two or three feet of top growth before you notice any root activity. For this reason, fall planting is ideal in mild regions. If one chooses to plant in spring or summer, it is useful to periodically pinch out the growing tips.

If you choose to plant in the fall, you will want to prune the following spring, no matter which pruning group your *Clematis* belongs to. Although this will inhibit flowering for the first year, it will help promote root development and produce a bushier plant.

If planting is done in the heat of the summer, it is essential that sufficient water is provided to keep roots moist and cool.

How

It should be pointed out that the *Clematis* you plant today needs to be happy with the effort you put into its planting site for the next several decades. There are *Clematis* over 80 years old still blooming marvelously.

Clematis need a cool, moist, deep root run, plenty of water and regular, balanced feeding. A little special preparation will ensure the proper environment. Dig a hole 18" deep by 18" wide (45cm x 45cm x 45cm). Cover the bottom with good rich compost or well-rotted manure. Add enough topsoil to cover the compost; now you are ready to plant. Place your well-watered *Clematis* in the hole so that about 6" (15cm) of stem is below the soil line. The stem of your *Clematis* needs to be ripe before you bury it. If you are concerned about this, leave the final filling of the hole until later in the season. The stem of the newly planted *Clematis* needs to be securely but carefully attached to a support so that damage to the stem does not occur. Planting a small shrub in front will insure a cool root run for the *Clematis*.

General Pruning Guidelines

Young, Newly Planted Clematis

Prune all newly-planted *Clematis* in Groups 2 and 3 (see below) the first and second spring after planting to 12" or to the second set of leaf nodes above the ground. Young, vigorous *Clematis* in Group 1 need this hard pruning just once. For Group 1 varieties, you can do this right after they flower the first spring after planting. This initial hard pruning is critical to promote strong growth and multiple stems from the base necessary to produce a magnificent flowering vine in your garden.

Group 1- Pruning Optional

Group 1 *Clematis* bloom primarily in spring on the previous year's growth. Pruning, if necessary, should be done *right after* the main period of flowering and no later than July, allowing the plant enough time to produce plenty of new growth to provide flowers the next year. As a general rule, prune out dead, weak and broken stems annually. As needed, prune to shape or to keep from becoming overgrown. If you prune a *Clematis* in this group, do it *after* it blooms. If growing in a tree, a *Clematis* from this group can be left alone for several years without much attention except to tidy up.

Examples: *alpina* and *macropetala* varieties, *armandii*, *cirrhosa*, *montana* varieties.

Group 2 - Prune Light

Most of these varieties have at least two periods of bloom from late spring/early summer through summer. Prune these in early spring when buds begin to swell and danger of severe frost has past. First, prune out dead, broken and weak stems. Then, starting at the top and moving down about 1/3 the height, prune just above a strong pair of buds on each stem. If there is a tangled mass of stems at the top, just cut below this, separate the stems and tie to the support.

This group includes many large single-flowered hybrids, semi-double and double-flowered varieties (examples: 'Arctic Queen,' 'Duchess of Edinburgh,' 'Elsa Spath,' 'Gillian Blades,' 'Henry,' 'H.F. Young,' 'Marie Boisselot,' 'Nelly Moser,' 'The President,' 'Will Goodwin').

Group 3 - Prune Hard

These varieties bloom on the current year's growth and generally flower from early summer to fall. Prune in early spring when buds begin to swell and danger of severe frost has passed. Starting from the base of the plant, move up 12-18" and prune, leaving two pairs of buds on each stem. If the plant is a herbaceous variety, it will die back to the ground. Many of these varieties are well suited for climbing into trees or combining with roses. A Group 3 *Clematis* growing into a tree can be left alone for several years. Pruning will be necessary when the *Clematis* needs to be tidied up or the flowering wood is too far out. Prune the *Clematis* back to the point on the tree trunk where the branches begin or further if desired. Pull the tangled mass of *Clematis* stems out from the tree. *Viticella* varieties are particularly well-suited for combining with roses and can be pruned at the same time as their rose companions, in early spring. Prune hard and simply pull off the last season's growth.

Examples: *viticellas*, *texensis* varieties, all herbaceous varieties, 'Huldine,' *terniflora*, *flammula*, *Jackmanii*, 'Comtesse de Bouchard,' 'Lady Balfour,' 'Perle d'Azure,' *orientalis* and *tangutica* types, 'Victoria'.

Fertilize And Mulch Clematis After Pruning

Clematis are heavy feeders. Use a balanced fertilizer, preferably an organic rose or tomato fertilizer. Amend depending on your soil conditions. Then add 2-3" of mulch. A second feeding is recommended in early summer after the first period of flowering. Always make sure the ground is moist before fertilizing. Plants in containers can be fed every two weeks with balanced liquid fertilizer.

Cultural Specifics

For Colder Climates

In colder climates where temperatures drop below 0°F (-20°C), foundation planting and mulch are required to ensure a long life. High light and long days can be ideal growing conditions for *Clematis* if a little care is taken when planting. By following the attached planting instructions, most varieties will survive and flourish.

Clematis set their buds when their stems reach the proper degree of hardness, so *Clematis* that take a full season to ripen in our temperate regions will ripen and bloom in the same season in our high light, high heat regions.

If a group B *Clematis* has its top growth frozen to ground level, new growth will come from buried dormant buds when planted properly and you will enjoy its flowers in midsummer rather than early summer. It is imperative that *Clematis* have shelter from baking hot sun. If planted on a sunny south or west wall, *Clematis* need to be protected from the sun's reflected heat. Under these conditions, the old adage of "their heads in the sun and their feet in the shade" must be adhered to at all times. An excellent method of accomplishing this is to plant behind a low growing shrub that will give shade to the first 3' (1m) of the plant.

Double-flowering varieties are usually not recommended in colder zones. They grow fine; if the tops freeze back and the previous season's growth is lost, however, only single flowers emerge. If any double flowers do develop, they will occur late in the season rather than early.

For More Temperate Zones

In temperate regions where temperatures never drop below 0°F (-20°C), *Clematis* plantings are limited only by imagination. Picture *Clematis* cascading over a fence; enjoy a vine-covered cottage; delight in it rambling through your trees. One favorite is a climbing rose with a summer blooming variety roaming through it.

Clematis are not heavy strangling vines. They grow through their host doing very little damage. If planting against a wall, your trellis should be constructed in such a way that it can be let down in one piece at house painting time. Most varieties perform well in full or filtered sun. Although *Clematis* prefer four or more hours of good light each day, they will grow in most locations, including a bright north wall. The pastel colored hybrids have more intense blooms if grown in one shadier locations.

Diseases and Pests

One of the greatest attributes of *Clematis* is the mass of blooms on such a delicate-looking frame. This can at times also be its downfall. If the plant is not securely attached to its host, stems can be damaged. The resulting wounds provide targets for a wide range of fungi. The plant then severely wilts or collapses. This malady happens most often when the plant is young. “*Clematis* wilt” is the catch phrase that has developed to describe this occurrence.

Ascochyta clematidina is the most common fungus to attack *Clematis* but is not always the culprit. *Clematis* wilt can occur at any time; it usually happens, however, just as the flower buds begin to open. The whole plant can be affected or, as most often happens, only one or two of the stems collapse. If *Clematis* wilt occurs, it is important to remove and destroy the affected stems. The fungus will remain in the healthy-looking part of the stem, so it is also imperative that about one inch (2.5 cm) of the stem below the infection be removed. New shoots will soon appear at or below the soil line. At worst, this therapeutic pruning will delay your flower display. Its very seldom that *Clematis* wilt destroys a whole plant. If the problem persists, the use of the fungicide benomyl will help.

An interesting aside to *Clematis* wilt is that it very seldom affects the species. Hybrids derived from *viticella* crosses, including ‘Madame Julia Correvon’ and ‘Etoile Violette,’ have also proven to be particularly resistant to the various fungi that cause this problem.

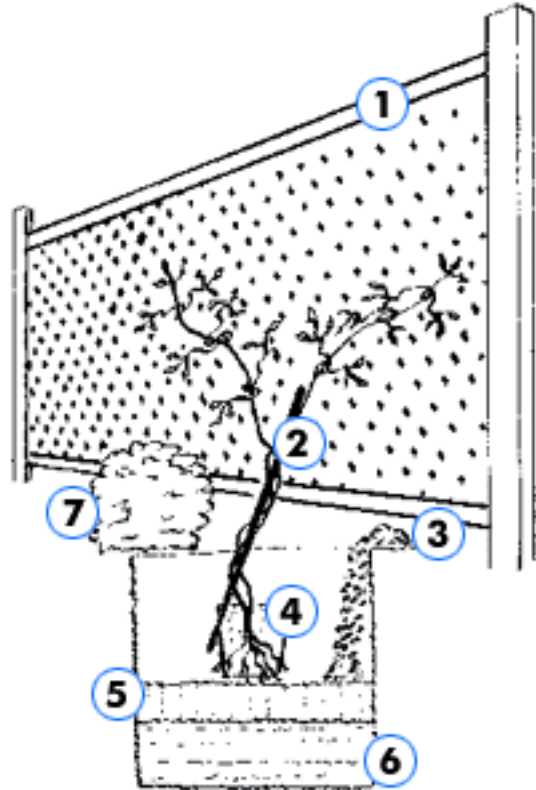
Another fungus that might affect your *Clematis* is mildew. It is seldom a problem until late in the season and not a problem at all if there is good air circulation. If mildew is noticed in its early stages, it can be easily controlled by many different fungicides readily available. Your local garden center or nursery will be happy to make an appropriate recommendation here.

Earwigs and slugs are the most common pest problems *Clematis* have. Slugs are the most troublesome. As they will always be with us, it’s a matter of control, not elimination. Slugs prefer to attack young shoots; thus, slug bait early in the spring gives the best results. Earwigs usually attack in midsummer and can turn the bloom of a late flowering *Clematis* into lacework over night. There are numerous effective pesticides and traps available to control earwigs.

Training Vining Clematis

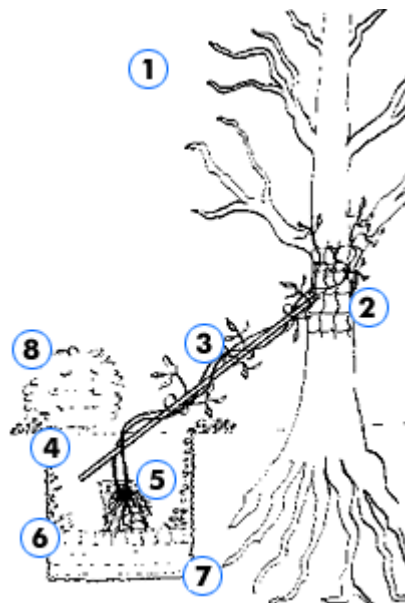
Planting Clematis on a Fence or Trellis

1. *Clematis* need something to climb on. Sweet pea netting or plastic mesh work well.
2. Carefully but securely attach vine to cane.
3. Back fill with good quality top soil (if your soil has a high clay content, add peat moss).
4. The top of the root ball should be at least 6" (15cm) below ground level.
5. A layer of good top soil (if soil has a high clay content, add peat moss).
6. Place 6" (15cm.) of well-rotted manure mixed with good top soil or compost.
7. Where practical, it is advisable to plant a small shrub to shade your *Clematis*'s roots.



Planting Clematis to Grow Through a Tree

1. If possible, plant outside the host tree's drip line.
2. *Clematis* need something to climb on; sweet pea netting or plastic mesh work well.
3. Carefully but securely attach vine to cane.
4. Back fill with good quality top soil (if your soil has a high clay content, add peat moss).
5. The top of the root ball should be at least 6" (15cm.) below ground level.
6. A layer of good top soil (if soil has a high clay content, add peat moss).
7. Place 6" (15cm.) of well-rotted manure mixed with good top soil or compost.
8. Where practical, it is advisable to plant a small shrub to shade your *Clematis*'s roots.

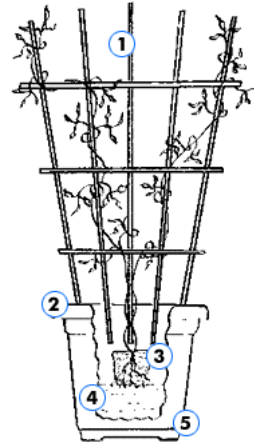


Planting Clematis in Containers

Many *Clematis* varieties are ideally suited to container growing. Special care must be given to choosing the right container, the right support, the right soil and, of course, the variety. The minimum size of container is 18" wide by 18" high by 18" deep (45cm x 45cm x 45cm). In picking a container, metal or any material that conducts heat should be avoided. A potting soil with a high content of coarse peat moss will help retain moisture but also provide sufficient drainage. Proper support is very important. If

you are going to grow your *Clematis* against a wall, a trellis of some sort is required. In lieu of a trellis, sweet pea netting stapled to a fence or wall serves as an inexpensive and effective support. If you wish to have your container free standing, a tripod of bamboo or cedar stakes works very well.

1. A tripod of strong canes makes a good free standing support. Many different trellises also work well.
2. If your container is large enough, annuals or a ground cover can be planted on the surface. Feed and water often to encourage blooms all summer.
3. The root ball should be in the center of the container.
4. Use a good potting soil.
5. Be sure to allow good drainage.



Resources

How to Contact Me

If you have any questions regarding my presentation or this handout, please feel free to contact me. My contact information is:

Cheryl M. English
3903 Grayton Street
Detroit, Michigan 48224-4003
(313) 690-3385 (cell)
cenglish@blackcatpottery.com

Written Sources

The following written sources are good introductions for the *Clematis* enthusiast:

Wilson, Christopher Grey. *Clematis: The Genus*. A more technical source, describing all 297 known species in detail. Appropriately subtitled *A Comprehensive Guide for Gardeners, Horticulturalists and Botanists*, Grey-Wilson also discusses cultivation, botany and issues of classification, making this an excellent source for the serious enthusiast.

Toomey, Mary and Leeds, Everett. *An Illustrated Encyclopedia of Clematis*. A comprehensive and exhaustive work covering everything from history and botany to pruning and propagation. Part II includes a directory of *Clematis*, by variety, including everything from parentage and “birth” date to pruning needs and flowering period. My only complaint is that it is arranged strictly by name and not group, so if you’re looking for a white *C. integrifolia*, you’ll have to go through page-by-page.

Buetler, Linda. *Gardening with Clematis: Design and Cultivation*. Excellent source on how to incorporate the genus into your garden with useful plant recommendations

Fretwell, Barry. *A Comprehensive Guide to Clematis*. A useful introductory source, focusing primarily on the more-commonly-seen large-flowering hybrids. This volume does not go into a great deal of detail regarding the genus, but does include excellent photographs of many of the large-flowering hybrids, especially useful when attempting to identify an improperly-labeled purchase from your local nursery.

Howells, John. *Choosing Your Clematis*. A straightforward guide to plant selection accessible for even the novice. *The Rose and Clematis as Good Companions*. The title speaks for itself. *Trouble Free Clematis: The Viticellas*. A unique source on this trusty group of plants. *Clematis: The Montanas*. A comprehensive source on this giant group of early-blooming *Clematis*.

Recent magazine articles include the May/June 2006 issue of *Fine Gardening*, discussing *Clematis*’ many different flowering forms. The August 2004 issue of *Horticulture* has an excellent article on Japanese nurseryman Kazushige Ozawa (recently deceased), who had been hybridizing *Clematis* for use in Japanese *ikebana*, or flower arranging. Highlighting *Clematis* as cut flowers, the May/June 2004 issue of *Garden Design* focuses on the nursery at Chalk Hill Clematis in California’s Sonoma County.

Sources for Nursery Stock

Garden Crossings (gardencrossings.com) in Zeeland, Michigan, ship their plants in excellent condition. High Country Gardens (highcountrygardens.com) was my source for *C. hirsutissima*. Purchasing dormant stock from mail-order nurseries is at best a hit-or miss affair: *Caveat emptor*.

For a more local source (at least for me), Telly's Greenhouse in Troy has the best selection of species *Clematis* I've come across, although I've seen (and purchased) species varieties (including *C. terniflora* "My Angel") at my local Lowe's. Be careful of buying at less specialized nurseries or stores – I have found their plants are often mislabeled as to variety and cultural needs.

Please let me know if you have come across any other nurseries or greenhouses offering a good Clematis selection in Southeastern Michigan!