



CLEMATIS

Clematis [**KLEM**-a-tis] is a member of the Ranunculaceae [buttercup] family. The word comes from the Greek and mean 'vine'. This genus includes about 250 species and numerous hybrids. It is a varied genus made up of mostly woody, deciduous, climbing plants, though a few are evergreen or herbaceous. There is a great variety in flower form, colour, bloom season, foliage effect and plant height. The leaves are opposite on the stem and mostly compound with 3 -5 leaflets. The leaf stalk twines like a tendril and is responsible for giving the plant support. The flowers are showy, having 4 [sometimes 5-8] petal-like sepals [no true petals] in numerous colours and shades. There are 3 general flower forms: small white flowers in panicles; bell or urn-shaped flowers; and flat or open flowers. Clematis are hardy plants many will survive to zone 3 and the plants can live for 25 years. The large-flowered hybrids may have blooms between 9 -20 cm across. The hardier species types have blooms ranging from 1 – 7 cm diameter with diverse shapes and habit. The one fault of clematis is that they are not attractive during the winter, when they are a tangle of bare stems.

There was little interest in clematis until the **1850's** when many were hybridized and improved. In **1890** George Jackman hybridized **C. texensis** [an American species] with large flowered hybrids to produce much sought after semi-herbaceous climbers with tulip shaped flowers. After that time their popularity waned again - maybe due to clematis wilt and other factors. Then there was another upsurge in interest when Walter Pennell introduced 26 large flowered hybrids during the **1950's**. From that time until the present clematis have been a popular flower used in large and small gardens throughout the northern hemisphere.

Large flowered hybrid types :

Probably the most well known are **C. x Jackmanii** and **C. Nelly Moser**.

There is also C. Jackmanni 'Superba', 'Alba' and 'Rubra'

C. x Ernest Markham and Ville de Lyon which have dark red flowers

C. x Huldine and Henryii both having white flowers

C. Comtesse de Bouchard which is pink

Smaller flowered species types :

These are hardier than the hybrids, and therefore more suitable for our growing region Zone 3b. Many of them tend to flower earlier than the hybrids, and often have showy, ball-shaped 'feathered' structures as seedheads. They are also much more resistant to the clematis wilt disease.

Clematis alpina [alpine virgin's bower] native to central and northern Europe and S.E. Asia has nodding 4 tepalled soft blue flowers that bloom on old wood at the end of May /beginning of June in this area. More blooms will appear on new wood in August, followed by feathery seedheads. Other cultivars of alpina include '**Willy**' [pink,] '**Pamela Jackman**' [deep blue], '**Sibirica**' [white], and '**Ruby**' [reddish/mauve]. Some of the newer varieties also have larger flowers ['**Frances Ravis**']

C. macropetala [downy clematis] is a similar relative from Asia. This type has double flowers, and flower at a similar time. Cultivars include ‘**Markham’s Pink**’ ‘**Maidwell Hall**’ and ‘**Snowbird**’.

C. koreana [Korean clematis] needs to be tied to a support in order to climb, bears solitary, nodding, bell-shaped flowers of reddish/ dull violet. **C. koreana** ‘**Brunet**’ has very dark rich purple flowers.

C. tangutica [the golden clematis]. This Asian native has single bright lemon-yellow , lantern shaped flowers on long stalks. Flowering from July to Sept. Grows vigorously to 8ft tall - sometimes becomes a bit weedy, but seedlings are easily controlled.

C. Kugotia [‘**Golden Tiara**’™] is a better form the petals having more substance and the dark stamens make a nice contrast.

C. serratifolia [the cut-leaf clematis.] A korean native and easily recognized by its soft yellow flowers with prominent purple stamens, flowering in August to September. It does have a suckering habit – so it is best to confine it.

C. viticella [Purple virgin’s bower] is absent from most N.A. nurseries. A native of southern Europe, it produces many small, nodding purple –blue flowers 2.5cm across. Many hybrids from this species are well known including ‘**Royal Velours**’ which has dark purple flowers. ‘**Etoile Violette**’ , ‘**Madame Julia Correvon**’, ‘**Alba Luxurians**’ .

Herbaceous types : include **C. recta** , **C. integrifolia** , **C.x durandii** and **C. heracleifolia**. None of these are vining types and therefore require some sort of structure to hold them upright or need a nearby shrub to grow through .

Buying a clematis:

In most cases clematis will be grown from purchased plants, either as one or two year old plants. It is better to buy a two year old specimen , as they are more vigorous with a husky root system and tougher stems. Select a specimen which has a cane supporting the top growth. Ideally, the depth of the pot will be deeper than the average pot-grown perennial. Choose one that has a sturdy bushy habit with dark green foliage. If there are a few roots coming out of the bottom of the pot - that’s fine , reject any that have moss growing on the soil surface.

When buying through mail order – you have no control over size or condition of plant . However , choosing a reliable company, and probably paying more, may ensure you can select the cultivar you want.

Planting Clematis:

Preferably plant them in the spring. Remember we are **zone 3b**. Consider the place where the clematis will be planted as site preparation is **very important**. They must have a **cool moist** root zone, which is often difficult to achieve because they are usually planted against a building wall. If this is the case, be sure that the hole is at least 12in away. Neither will clematis stand a wet site, so the soil must drain well. Do not plant in heavy clay where water puddles, and make sure that the ground is well watered prior to winter freeze-up. **Good site preparation** is very important. Soil should be amended using compost, well rotted manure, bonemeal, then mulch. Soak the potted clematis in a bucket of lukewarm water for half an hour before planting it. Clematis should **always** be planted very deeply. Climbing types require a strong support of wires, lattice, tree or shrub. Herbaceous types will need confining with an obelisk or other type of structure.

Newly planted clematis should be hard pruned in the first early spring [March or April] after planting. Remove the top growth by making a clean cut just above the first set of live buds on each stem. This will cause the plant to grow into two stems or shoots. Pinch out these growing stems once or twice during spring. The **exception** to this general rule are the herbaceous clematis [*C. recta*, *C. integrifolia* and *C. heracleifolia*] which should be hard pruned in very early spring, irrespective of age. ie treat them just as any other herbaceous plant.

Propagation :

Division : This can be done in the early spring , using a sharp spade and slice off pieces from the outer edges. This is really only practical when dealing with the herbaceous types such as *C. integrifolia* or *C. recta* as both will eventually make large clumps.

Grafting: This used to be a popular method as some species were almost impossible to propagate from cuttings.

Cuttings: Some books indicate this method is not that easy, however it is a method ensuring that results are 'true to type.' *C. montana* and *C. orientalis* are actually fairly successful .

Seed: This method often results in poor specimens , *C. tangutica* is the least likely to vary greatly. The alpina group produce masses of seedlings, however they should be culled to only save those having the best colours.

Layering: Again a useful method ensuring 'true to type', but it can be a lengthy procedure.

Pruning :

There is great confusion about the pruning of clematis.... If you prune at the wrong time the worst that can happen is there will be fewer flowers for that season, and if you do absolutely nothing with your vines the - sky will not fall ! These vines are survivors ! However, there are some basic principles depending on the type of clematis, and it is helpful to remember the name of your plant as the guidelines for pruning clematis fall into **3 main groups :**

A [1] is for **after blooming .** This is for types that flower in early spring eg *montana*, *armandii*, *macropetala* and *alpina*. Don't prune until after flowering. Try not to cut into very old wood. Prune only when necessary ie to keep within bounds. groups.

B [2] is **before blooming.** This is for those types that bloom in late spring / early summer - this includes most large flowering hybrid types [ie hybrids such as *C. The President*, *C. Rebecca* and *C. Royal Velvet*]. In the spring cut the stems back to a set of **live** buds about 1/3 down from the top of the plant.

NB. Hard prune down to 12in for the first 2 years after planting, this will develop a strong root system ensuring a tough plant more able to withstand adverse conditions. **Also** note that double flowering clematis bear the flowers on old wood, so if you prune before flowering , you lose all the doubles for that year. Most will flower a second time later in the season , but this time the flowers are singles. If this type needs to be pruned then do it immediately after the double flowers have finished . Examples of these are *C. 'Vyvyan Pennell* [blue] and ***Duchess of Edinburgh*** [white] .

C [3] is for **cut back hard.** This is for types that flower in summer / early fall and include *viticella* cultivars, *tangutica*, *texensis* and *crispa*.

Pests and Diseases:

Generally clematis are not really bothered by many pests etc. When under stress eg from drought, and other poor cultivation practices, will be more susceptible to insect infestation or powdery mildew.

Clematis Wilt A catastrophic disease affecting clematis, when the vine can appear very healthy one day and almost dead the next. This is due to a fungus **phoma clematidina** which may attack any part of the plant to just below ground level. Initial symptoms are usually the sudden wilting of upper parts of shoots. Cut back to clean tissue even below ground level. No fungicides are approved for the home gardener. Very occasionally the plant will recover. **NB.** The small flowering species types are not usually affected by this disease.

Slime flux : This unusual problem is caused by a combination of unidentified fungi, yeasts and bacteria. Affected shoots become covered with a cream, pink or orange slimy growth. The cause being a wound through which some of the plant's sap escapes. Bacteria and other organisms ferment the sap, producing the foul-smelling slime. The stem dies about this point. There is no control. Cut back the stem below the wound and remove the diseased tissue.

Powdery Mildew: This may occur when plants are in a sheltered place, against a wall, and weather conditions play a big factor. Ensuring good air circulation, and keeping the root system well watered in times of drought will be beneficial. Don't water using an overhead spray. Spraying with Benlate may also help.

Viruses: Distortions of the flowers and markings on the leaves will indicate this condition. There is no treatment. Remove the affected plant and avoid planting clematis in this spot again.

Slugs and Snails: These pests can destroy new shoots on young plants. Hand pick them and remove, surrounding the base of young plants with sharp grit or diatomaceous earth will deter them.

Other pests may include rabbits, mice, earwigs, aphids, and birds.

Discoloured flowers are often a result of cold temperatures whilst the buds are forming. A dose of sulphate of potash may help.

Books:

Clematis by Christopher Lloyd [revised with Tom Bennett 1989]
ISBN 0-913643-04-1

Clematis by Barry Fretwell
ISBN 0-913643-03-3

Gardening with Clematis by Linda Beutler
ISBN 0-88192-644-2

Timber Press pocket guide to Clematis by Mary Toomey, with Everett Leeds & Charles Chessire
ISBN - 10 0-88192-814-3

Prepared By Susan Jaward MG 2010

www.tbmastergardeners.homestead.com