



Woody Peony Culture and Care

Groups, General Information, Growing and Planting

3 GROUPS, ALLOWING CHOICES FOR THE GARDENER

Woody peonies can be categorized into three main groups. Each group has unique floral characteristics, plant habits, climate tolerances and cultural needs. Most can be grown in USDA Hardiness Zones 4-8, but other climate variables (other than temperature) may impact their growth.

GROUP 1: PAEONIA SUFFRUTICOSA CULTIVARS

Tree Peonies have been grown for centuries in China and Japan. These plants are mainly from the man-made species *P. suffruticosa*, which has been selectively bred in China for centuries. *P. suffruticosa* does not occur in nature and is actually a hybrid group of plants derived from 4 to 6 species.

In Japan, *P. suffruticosa* cultivars are referred to as 'Moutan' (Bouton) and in China 'Mudan'. They are among the most cherished plants in these nations and should receive much greater attention in American gardens. Many cultivars available are historic hybrids that may be hundreds of years old, giving testimony to their durability. The Japanese and Chinese *suffruticosa* selections are less tolerant of wet conditions and are often damaged during rainy seasons, especially in heavy soils. Plants originating from China have typically been the most available at low prices. Unfortunately the Chinese *P. suffruticosa* cultivars were genetically selected to grow best in semi-arid conditions--making them a poor choice for most American gardens. All are certainly beautiful, but have also caused many an American gardener to regard woody peonies as difficult to grow. However, there are many choices to suit the diverse American gardener's needs.

These plants often produce very large flowers of light substance (crepe paper is a good comparison). They typically bloom from stems that are a year or more in age and are vigorous growers when sited properly. This group is the first to bloom, but a number of cultivars bloom with the later flowering types. Most will attain heights of 3 to 5 feet in areas in which stems are not lost due to disease or winter conditions. Foliage is quite ornamental and they make wonderful landscape plants. Plants sited in areas where flowers are shaded from the sun during the hottest part of the day will help the blooms last longer.

As noted above, *Paeonia suffruticosa* cultivars are the most commonly available and grown woody peony. However, this woody group may not be a good choice for all gardeners in the United States (specifically the Chinese *P. suffruticosa* cultivars). Plants in this group may be grown in USDA Hardiness Zones 4-8 and the woody stems will usually survive winter temperatures that fall to -25F. Wet winters that have many freeze-thaw events may impact the

survival of stems and the Japanese cultivars are more resilient to these conditions than Chinese origin plants. Plants will routinely lose stems from winter kill, but are replaced by young vigorous growth from below the damaged area.

Areas of the United States which experience cool wet springs cause the most difficulty for the is group of plants. A fungal disease (botrytis) commonly attacks new growth on old and new stems, causing the afflicted stems to wilt or simply fail to grow. Spring periods that are characterized by cool, cloudy and rainy weather are likely to cause problems with *P. suffruticosa* cultivars. Removal of diseased stems, by cutting stems well below the area is recommended as soon as possible.

Planting *P. suffruticosa* cultivars in areas that have good air movement will help to keep them healthy. Avoid windy locations, since stems are easily broken. Plants grow best in full sun, but flowers last longer if lightly shaded during the hottest part of the day.

Cultivars produced in Japan and the United States are the best candidates for American Gardens, as they were selected in more rigorous climates. Example cultivars that have done well in Wisconsin: 'Hana Kiso', Shima Nishiki, Shima Daijin, Ruffled Pink Petticoats, Shichifukjin, Kamata Fuji, Krickles, Toichi Ruby, Shimane Chojuraku, Renkaku, Lavender Grace, etc...

GROUP 2: PAEONIA ROCKII INFLUENCE CULTIVARS AND HYBRIDS

Paeonia rockii is a species that originates in colder areas of China and is the most hardy stemmed of all the woody peonies. There are numerous Chinese cultivars and a growing number of American and European representatives of this group. *P. rockii* is easily hybridized with plants from the *P. suffruticosa* group and many of the resulting plants retain its hardiness as well as other plant and floral characteristics.

Cultivars from this group are well suited for the coldest growing zones in American gardens. Most cultivars show no winter stem kill, even after temperatures that fall into the -30F range. Like *suffruticosa* cultivars they bloom from buds formed on older wood, thus stem hardiness is important. Older stems on a number of cultivars may reach 6 feet in height. Plants are often wider than are high and over time will become quite large.

Plants are highly adaptable, but are a bit slower to establish than other woody peony groups. Like all woody peonies they prefer soil with excellent drainage and are quite drought resistant once established. They make excellent landscape plant and are the least demanding of the woody peonies.

Flowers may be double, semi-double or single in form, but all will likely have the characteristic dark basal flare on each petal. Many cultivars are scented with a sweet rose-like fragrance. Born in profusion, flowers benefit from some light shade to prolong their life (plants do best in full sun).

Many fine cultivars originate from China, but not all of them have consistent form and plant habits. Thus, some research will be needed to determine quality.

Cultivars that have done well here are: Angel Emily, Baron Thyssen Bornemisza, Lavender Hill, Zi Mei Cha Cui, Yin Zhuang sug uo, Dojean, Rock's Variety (Joseph Rock), Angel Choir, Zi Yan, Souvenir de Ingo Schiewe, etc...

GROUP 3: PAEONIA LUTEA HYBRIDS

The lutea hybrids are comprised of newer cultivars initially produced from crossing *Paeonia delavayi* with *P. suffruticosa* cultivars. The yellow form of *P. delavayi* was once known as *P. lutea*, hence the name of this group. The species, *P. delavayi* is tender in Wisconsin and not easily grown without special considerations, but the hybrids are more cold tolerant. Plants themselves tend to be shorter growing than the other woody peonies and often produce more stems from below the ground (a good thing). Leaf structure varies widely from cultivar to cultivar and is often quite ornamental. The lutea hybrids have the widest range of color, ranging from deep red, pink, lavender, yellow to coral and orange blends. Flower forms are as diverse as their colors, exhibiting single, double and semi-double with a variety of petal forms. Many of the original hybrids available today were produced in France and United States. A.P. Saunders (United States) did much hybridizing work to produce the F1 plants that have been further used to create advanced generation lutea hybrids.

The early cultivars derived directly from crosses of *P. delavayi* x *P. suffruticosa* have the least hardy stems, but progeny of these plants have proved hardier and are excellent choices for the garden. Lutea hybrids have somewhat less cold tolerant stems than the Japanese and rockii varieties, but can be successfully grown in Wisconsin in most locations (USDA Zone 4, or higher). During very cold winters, above ground stems are often completely lost, but are replaced the following spring with vigorous growth from below ground level. The new growth often produces good bloom and plants show no overall affect from the prior poor winter conditions.

Plants are more tolerant of cool, wet spring conditions and are more disease resistant than *suffruticosa* and *rockii* groups. Due to disease resistance, this group is especially important for areas that experience these condition (upper mid-west and the Pacific Northwest).

Flowers have greater substance and lasting qualities than those of the other groups. Some are fragrant, with a vanilla or citrus scent. Again, the flowers will last longer if given light shade, but plants appreciate full sun. Flower color can be quite variable from year to year and on different soil, thus don't expect to see the same expression each year or in different locations. Many Lutea hybrid cultivars produce more than one flower per stem and often have extended bloom periods due to side buds opening at different times.

Cultivars that have done well here are: Anna Marie, Age of Gold, Alicia Nicole, Beach Comber, Aquila, Copper King, Ice Age, Iphigenia, Lois Elaine Laning, Lyra, Manchurian Promise, Maria Teresa, Tria, Vesuvian, Rosalind Elsie Franklin, Hephestos, Wisteria Reflections, Leda, Zeus and more...

GENERAL WOODY PEONY INFORMATION (woody peonies are not suitable for containerized planting)

Plant growth is relatively slow and it may take certain cultivars 3 or more years to mature into flowering plants. Young tree peonies often do not bloom true to form and will only show fully developed and colored flowers on mature/established plants. Once plants are established they may grow in one place in excess of 50 years.

Tree peonies are typically propagated by grafting a scion (stem and bud) on to a peony root (usually a herbaceous peony root). Grafted plants that are 3 years or older usually begin to bloom reliably and begin developing their own root systems. Grafted plants have received much bad press, but in reality are excellent choices for northern gardeners planting in the fall. The herbaceous root stock of grafted plants is well adapted to growing in cool, damp soils and is more vigorous than own root plants. Own root plants require warmer soil to root and are often slower to establish. When growing grafted plants gardeners should watch for herbaceous leaves arising from their bases. If this very different leaf type is detected, the eyes of this portion should be cut away below ground so that it does not overtake the woody peony. Plants that have been imported from Japan or China are most likely to have this 'adventitious' root stock and should be avoided. Plants originating from overseas are often less expensive and they are more likely to exhibit this problem. Additionally, plants produced overseas are often mislabeled, causing more frustration! Spending a few extra dollars for proven plants will insure a better plant and one that is what was paid for.

Some woody peonies are grafted on to their own roots, which is desirable, but unlikely due to available root material. Division of tree peony roots is not typically an option since plants tend to grow off a centralized root system, but certain varieties are better subjects for this type of propagation. Marketers of woody peonies often tout 'own root' plants as being better than grafted plants. In truth, the grafted plants tend to establish more quickly and are able to withstand adverse soil conditions more easily. Own root plants have an upside though, the gardener would never have to remove an old herbaceous nurse root if it were to impede growth. Ultimately, the woody peonies should be encouraged to produce their own roots, as this root structure is a best for the long term health of the plant.

Most plants available commercially are 1 to 5 years in age. Larger, older plants are problematic due to their size and inability to establish as quickly and easily as their more youthful counterparts. Older plants can be successfully transplanted if most of their woody stem structure is cut away. Starting with younger plants tends to be most rewarding. One should not base a purchase on the number of stems a plant has. Again a harsh cutback of woody stems is highly beneficial at the time of transplant. Cutting away the woody stem structure may or may not destroy buds that would bloom the following year, but will also ensure that the plant survives and produces proportional stem to root structure after transplant.

GROWING & PLANTING

Site Selection: A site that drains well and is not in competition with large tree roots in a must. The placement should receive at least one half day of sun (preferably morning sun vs. afternoon sun) or bright filtered light. The plant would prefer full sun all day, but the flowers

last longer with some shade. The soil should be loose and not compacted if possible. Soils with high organic material are most preferred, but clay works well if it drains. Gravel and sandy soils generally drain well, but are often missing nutrients important for tree peony growth. Soils overlying limestone are excellent for growing woody peonies as the soils contain micronutrients and minerals used by this group. Avoid incorporating manure, **peat** and large amounts of undecayed organic material, as these materials often retain water and their decay has a negative impact on growth. Overly wet soils are probably a tree peony's worst enemy; in fact, a fairly dry location will suit the plant very well. Since tree peonies do not generally like to be disturbed, select a planting place that will accommodate the plant for many years without movement. Remember to allow plenty of space around the plant since in several years it could be large plant.

Planting

Start by digging a hole that will easily accommodate all of the peony's roots. Do not squeeze the plant into the hole, as the roots may begin to grow and push the plant out of the ground. Grafted plants should have the graft buried from 4" to 6" below the ground (or more), so that it is well protected from environmental changes. Most woody peony plants arriving by mail order will have a planting depth marked on a stem, which is helpful if your climate is similar to the grower/shipper. Shallow planting of grafted peonies is the number 1 reason for long term failure. Tree peonies are best planted much deeper than their herbaceous relatives—this often promotes growth from below ground and creates a fuller looking plant. We've found that burying the root system to 6" or more (this means some of the stems are buried as well) will allow the stems to root quickly and branch below the ground. Many of our plants will have only an inch or less of stem above the ground after planting them! It is not unusual for tree peonies to arrive in the mail with most of the stems cut off or completely cut off, leaving only roots and some eyes. This is very beneficial to the plant, as it will grow new stems the following growing season that are appropriate in size for the plant's root system to get a good start. Typically, plants that arrive with many branches will lose these older stems over first or second winter or will not prosper. Fill the planting hole approximately 3/4 full of earth around the plant and water the soil thoroughly so that all air pockets are removed. Proceed to fill in the remainder of the hole with soil and add water as you fill. Lightly press down the soil around the plant with your hands once you have finished. We no longer advise the use of mulch due to climate change, which often creates wet conditions during periods of the year when plants are no longer growing. If mulch is used, keep it away from the plant (at least 8 inches or more).

Care

Generally tree peonies do not require much care after their first season. During the first winter it is wise to mulch the plant so that it is not moved around by spring freeze-thaw cycles. We mound soil on top of our first year plantings in the field. This has proven successful in getting the plants through their first winter. Watering during very dry periods during the following summer may be needed until the plant's root system establishes itself. Once the plant is established very little care and watering will be needed. If watering is necessary during extreme drought, water the base of the plant not the foliage. Note: Woody peonies are drought tolerant,

this does not mean they will perform well on dry soil. To the contrary, they appreciate water available to their root systems throughout all seasons.

Tree peonies, like all peonies, can get botrytis, a fungal disease which appears as black spots on the foliage or stems. Wet conditions can cause this fungus to be problematic and the best treatment is prevention. Keep the plants well ventilated and remove diseased portions of the plant upon discovery. Make sure to remove cut off diseased plant parts from the garden to prevent it spread. Commercial fungicides may also be used and a local garden center should be consulted (copper sprays tend to be most effective). Fall cleanup of the peony leaves is also a good method of avoiding this problem.

Fertilizing may be necessary at some point. Avoid high nitrogen fertilizers as this will cause excessive foliage to be made at the expense of flowering and may promote disease on soft new growth. It appears that tree peonies like limey soil with a PH from 6.5 to 7.5. A bit of agricultural lime sprinkled around the base of the plant has proven to produce better growth in following years. A soil test is a good idea if you suspect that your plant(s) is missing something nutritionally. Avoid the use of manure around woody peonies as this appears to promote disease organisms.

No winter protection on established plants should be necessary. A tall plant may lose stems from time to time during very cold temperatures, but new growth will arise from the base of the plant, if planted deeply enough. From time to time dead wood will need to be cut from the plant to keep it looking good. Do not cut down tree peonies in the fall like you would a herbaceous or intersectional peony, since the woody stems carry some of the next year's flowering buds. One exception to this would be if you would like more stems to arise from the ground. In this case, cutting the woody stems to the ground encourages dormant buds below the ground to grow into stems the following season and sometimes these will bloom their first season, but more likely the next season. We've used this tactic on plants that are in decline or have been slow to spread to the desired width.

The best transplanting time for woody peonies is fall, once next year's dormant buds have been made. Roots on the plant are developing in early fall and continue long after the plants have lost their foliage. Generally spring planting of woody peonies is not successful due to the lack of root growth during this period. Plants that do not outright die from spring planting, will often show extreme wilting during summer and a lack of growth. If they make it to fall alive, it is likely they will establish and grow the next year.

In summation, tree peonies are wonderful long-term additions to a garden. Some patience will be required while the plants mature, but in the long run they are extremely rewarding and will likely become one of the 'favorite' plants in the garden. Try them, you won't be disappointed.

For further information about woody peonies, we recommend visiting the American Peony Society's website at: <https://americanpeonysociety.org/learn/woody-peonies/#overview> .

Better yet, join the American Peony Society for more in-depth information.

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