

The Woodies-Part 3

Paeonia rockii and Hybrids

-Nate Bremer-

This article and others were a part of a series about woody peonies which recently appeared in the American Peony Society's Bulletin. This article does not include images that were printed with the edited feature articles. For complete articles with images, please become a member of the American Peony Society for published version access.

The species, Paeonia rockii, was discussed in the first article in this series about woody peonies. Here we'll take a look at the hybrids that were derived from P. rockii.

Paeonia rockii was introduced to Europe and the United States through seeds collected by Joseph Rock in 1925, a plant collector for the Arnold Arboretum. The seeds collected by Rock at the Choni Lamasery were not actually the species P. rockii, but rather a hybrid with an unknown P. suffruticosa cultivar or seedling. For nearly 75 years the seeds grown from Rock's peony were presumed to be the species, but recent advances in genetic markers and the identification of the true species in the wild have brought light to what Rock actually found. Seeds were distributed to a number of botanic gardens, plant enthusiasts, hybridizers and taxonomists in 1927. A good number of these seeds produced plants that were grown and bloomed successfully. These seed grown plants from the collection by Rock are commonly called 'Rock's Variety', 'Joseph Rock' and all too often P. rockii (incorrectly). There is a U.S. form and U.K. forms that have been used extensively in hybridizing and are widely distributed. For those interested in precise account of the plants/seeds from the Rock collection, Will McLewin and Dezhong Chen have an excellent and detailed chapter on the history of Rock's peony in their book entitled <u>Peony rockii and Gansu Mudan.</u>

While 'Rock's Variety' is not the true species, it does exhibit many of the outstanding qualities of the taxon and is responsible for a variety of outstanding hybrids. For hybridizers it was a major step in the right direction in solving some of the ills that P. suffruticosa cultivars suffer in continental climates. Progeny of 'Rock's Variety' are more resilient to fungal attacks, are adaptable to wide ranging soils, soil conditions and variable climate anomalies. In Wisconsin it is not unusual for rockii lineage plants to attain heights greater than 5 feet, somewhat closer to the 'tree' moniker, due to very hardy long lived woody stems. Their ability to withstand excessive water in the environment at certain times of the year has also been a welcome trait. The floriferous plants produce flowers which are often very large and have the signature rockii basal flare on each petal. Most European and American rockii lineage plants are single to semidouble in form and have a light sweet fragrance. Until recently, hybridizers in the U.S. and Europe used the same genetic pool supplied by the seed Rock collected. This morsel of information explains why so many of the plants behave similarly and have many of the same characteristics. Within the last 20 or so years the true Paeonia rockii has found its way onto the hybridizer's pallet (mostly in Europe) and some truly spectacular results are being seen. Flower

color, flower size, plant habit and foliage characteristics using the species have broadened the outcomes of rockii lineage plants.

Another source of P. rockii genes are the Gansu Mudan, which are rockii hybrid cultivars developed in the Gansu province of China. The Gansu Mudan are not readily available outside of China, but a fair number of fine examples have made their way to European and American gardens. Most of the Gansu Mudan perform very well in Wisconsin, but there are a few that struggle and appear to be better adapted to their origin-China. Ball shaped double formed flowers are rare in the American and European hybrids, but are quite well represented in the Gansu Mudan. Since the Gansu Mudan are likely more diverse in their genetic makeup than the American and European hybrids, it is no wonder that their foliage and plant habits are equally diverse.

Rockii hybrids are most often derived from crosses with P. suffruticosa (P. suffruticosa is often difficult to keep healthy in our erratic continental climate), which are quite compatible in the production of viable seed. These rockii x suffruticosa crosses often capture some of most positive characteristics of their parents-flower size, color, fragrance and hardiness. The inclusion of rockii genes in the offspring of this cross often increases tolerance to irregular or erratic soil moisture in the environment. Whether the flower form is double or single, the dark flares are an indicator that P. rockii is part of the plant's lineage. Most American gardeners have yet to become familiar with this wonderful group of woody peonies and will likely be quickly won over by its many virtues.

Culture is generally easy with this group. Like most peonies they would prefer a well-drained soil that does not become soggy at any point in the year. We've found them to be quite adaptable to our heavy clay soils, as long as water is able to drain from the planting area. Full sun is best for plant growth and flower production, but they do tolerate semi-shaded locations that receive a good half day of sunlight. Flowers will last longer if they are shaded during the hottest part of the day, but are produced in less profusion. Plants in this group have stout stems that easily withstand windy locations, but the very large flowers are easily damaged in such situations. Plants are extremely drought tolerant once established and require little if any additional irrigation. An established P. rockii cultivar is much like an ice berg, the visible plant above the soil is only a small portion of the entire plant. We often run into rockii roots more than eight feet away from the origin plant and can only imagine the entire depth and breadth of the root system. Cold tolerance of most rockii cultivars is exceptional when compared to the other woody peonies. A number of sources make mention of USDA Zone 3 hardiness and perhaps lower. Temperatures at our farm have reached 35F below zero on a number of occasions over the past 20 years and the rockii cultivars have shown no damage from these low temperatures. They are equally heat tolerant, suffering no damage from 100 degree temperatures during drought years. In most instances the woody stems are long lived and much less pruning of dead wood is required compared to the suffruticosa or lutea hybrids.

Most rockii cultivars are sold on grafted rootstock, since these very woody plants do not easily lend themselves to division, although there are exceptions. Many cultivars form a large central stem or trunk, while a number of others produce shrubbier growth with ground shoots. Those that produce ground shoots are more likely to be divided to produce own root divisions. Please note that P. rockii cultivars have long, thin and very woody roots, which individually have a small storage capacity for energy. The root system of established plants, in their entirety, is massive due to the quantity of roots. Rockii cultivars are typically slow to establish and those that are grafted on to herbaceous rootstock will provide a faster start than own root plants. Since the herbaceous nurse root on grafted plants generally has a large mass, it also has a greater energy storage and also is faster growing than woody peony roots. Planting grafted plants deeply so that at least 6 inches of stem is buried is important to promote the plant's production of its own roots. Ultimately, 'own' root plants will produce a healthier and larger plant after a few years of growth due to the breadth and depth with which woody peony root systems develop. It should be noted that large P. rockii plants do not transplant well and it is far better to start with a small vigorous grafted plant. Keep in mind that the young plant will remain rather small for a few years, but by its tenth year it may cover an area greater than 8 feet by 8 feet (if well grown and depending on the cultivar).

We grow more than 50 named P. rockii cultivars and countless seedlings produced from crosses with other P. rockii lineage cultivars and P. suffruticosa cultivars. Most are outstanding, but a few are even superior in our opinion.

Xue Hai Bing Xin (Gansu mudan) has exceptional dark blue green foliage with many fine leaflets and attains a height of 7 ¹/₂ or more feet and 5 feet wide in the open field. By contrast, 'Rock's Variety' only reaches 5 feet in height, but maybe 10 feet in width. The large single flowers open white with a slight blush of pink and have nearly black-maroon flares. After a day, the flat, dinner plate formed flowers have faded completely to white and retain the incredibly dark flares. Foliage remains impeccable until late fall, making it an outstanding landscape specimen when not in bloom. For the hybridizer, Xue Hai Bing Xin is incredibly fertile.

Zi Yan, He Ping Lan and Zi Mei Cha Cui are other excellent of examples of Gansu mudan, but are wider than tall. These plants produce finer/thinner stems with many branches and are copious ground shoot producers. They are also extremely prolific growers and bloomers. All have the characteristic deeply colored basal flares. Zi Yan produces dark oxblood red flowers that in some years are double and others single. Individual leaves have numerous leaflets that widely spaced on the petioles. He Ping Lan produces smaller single lavender flowers in profusion and is a handsome mounded plant to about 4 feet in height and 5 feet in width. Zi Mei Cha Cui blooms with large full double blooms of magenta red. Flowers nod a bit but the strong stems do not allow them to touch the ground and are evenly distributed around the 5 foot by 6 foot plants. All three of the above Gansu mudan cultivar are outstanding performers and fully hardy in upper Midwest continental climates.

DoJean (European hybrid) was produced by the lawyer, politician, diplomat, scholar, photographer, spy and gardener, Sir Peter Smithers. The hybridizer is quite an interesting person in his own right, but his hybrids, using the U.K. form of Rock's Peony are equally well known among peony collectors. Smither's named this white beauty with heavily ruffled petals for his wife, by the same name. The flower is beautifully symmetric and has reddish maroon flares. It has a striking sheath that matches the flare color, which is surrounded by a perfect ring of golden stamens. Plants have deep blue green foliage with broad rounded leaflets. It is a cross between Hinode Sekai and the U.K. form of Rock's peony. Fertile. Baron Thyssen Bornemisza (European hybrid) produces very large semi-double flowers of mauve pink with dark maroon flares. Flowers have excellent upright carriage and are produced in profusion. This Smithers hybrid is among the best in which the U.K. form of Rock's peony was used as a parent. Parentage, P. suffruticosa Rock's Variety (U.K. form), pollinated by Kamada Fuji, first year bloomed 1987. A strong easy grower, it attains a height of around 4 ¹/₂ feet and a width of 5 feet in Wisconsin. Named for a famous European industrialist. Fertile.

Angel Choir (American hybrid) is a cross between Rock's Variety and Kamata Fuji, the same suffruticosa parent that was used to produce the cultivar Baron Thyssen Bornemisza. Roger Anderson, the famous intersectional peony hybridizer introduced this white semi-double with dark maroon flares in 1992. The flowers much resemble many of the other white rockii lineage hybrids, but have more petals which are perfectly arranged. Plants are strong growers and produce multitudes of flowers just as many of the suffruticosa cultivars finish up their bloom. The annual consistency of growth and bloom on this plant are peerless and is one of the best in my opinion. Fertile.

Angel Emily (American hybrid) is the same cross as Baron Thyssen Bornemisza and Angel Choir, only hybridized by William Seidl. I was honored to introduce this plant for Bill in 2013, after being introduced to his 30 year old plant in bloom with more than 100 flowers, open to perfection, some years earlier. The semi-double flowers are a lavender with dark flares and the petal edges often fade after a day to give a frosted affect. This is the heaviest blooming rockii lineage plant we grow and is extremely reliable from year to year. A slow grower in its first 3 or 4 years, it will only impress thereafter. Fertile.

Lavender Hill (American hybrid), another Seidl hybrid, produces many petalled semi-double to double lavender blooms. Plants have wonderful small rounded leaflets with notches. The woody stems carry the heavy medium sized flowers to perfection. Here again it is a cross between Kamata Fuji and Rock's Variety (apparently this is a very good combination). A twelve year old plant in our garden is 4 ¹/₂ feet tall and 5 feet in width.

Souvenir de Ingo Schiewe (German hybrid) produces large single flowers that are a deep luminescent lavender and have diamond dusting in the petals. Flares are very dark and are a perfect complement to the petal color. Plants produce thick stems over time with a heavy bark covering. Leaflets are deep blue-green, are rounded and puckered. The 5 foot plants are striking throughout the growing season and make an excellent landscape specimen.

I am now beginning to grow a number of other German introductions from Irmtraud Rieck, which in some cases utilize Paeonia rockii subspecies rockii (linyanshanii). These new rockii genes create quite unique traits in the hybrids and I am looking forward to the new plant and flower forms exhibited in the plants. Many other rockii lineage hybrids exist which are exceptional and what was mentioned above only scratches the surface. This group is highly recommended for the beginner or gardener growing in areas that experience difficult winter conditions. With that said, I can also say that I have seen excellent looking specimens growing well in warmer climates, like North Carolina. Make your garden 'rock' with a rockii lineage hybrid!

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