

## Woodland Peonies for Great Seasonal Drama

I couldn't imagine a Garden in May without Peonies. From the days of my youth, I remember their vibrant flowers, accompanied by a wonderfully sweet scent that my mother and grandmother always revered! The flowers range from single blooms with one ring of petals to the full doubles displaying countless petals. The abundant petals of the doubles pique the interest of most gardeners, yet the weight of the flowers following a spring rain often brings the floral stems to the ground. It took many years for me to appreciate how the single flowered forms were far more weather resistant, often eliminating the need for staking. It took even more years for me to learn and marvel at the Woodland Peonies. With attractive single flowers in spring and dramatic seed displays come fall, the beauty of *Paeonia japonica* and *Paeonia obovata* – as they are known commercially – remain unknown to many gardeners!

Peonies are a member of their own family or Paeoniaceae. Much debate still revolves around the number of true species as the numbers vary between 25 and 40 species. Plants are native to Asia, Europe and even Western North America. In China, Peony flowers were highly prized while the thick fleshy roots were used medicinally for the treatment of a number of maladies. The genus was initially penned in 1753 by the Swedish botanist Carl Linnaeus (1707-1778). Linnaeus often looked to Greek mythology for inspiration and this genus was no exception. Influenced by the medicinal uses of the root, Linnaeus named the genus after Paieon, the mythical physician to the gods who was revered for his ability to heal wounds received in battle.

The Woodland Peony I first came to appreciate was a white flowered plant with attractive and prominent yellow anthers, traditionally known as *Paeonia japonica* (pictured at right). Native to the northern islands of Japan, it was first described in 1898 by the Japanese botanist Tomitaro Makino (1862-1957), who named it *Paeonia obovata* var. *japonica*. Having described over 2,500 plants, Makino is known as the Father of Japanese Botany and is honored on the date of his birthday, April 24<sup>th</sup> when Japan annually celebrates Botany Day! In 1910, the Japanese botanists Kingo Miyabe (1860-1951) and Hisayoshi Takeda (1883-1972) elevated the plant to species status and named it *Paeonia japonica*. The name remained for nearly a century, although questions continually surrounded the plant due to the many overlapping similarities with *Paeonia obovata*. In 1997 the Czech botanist Josef Jakob Halda (1943- ) suggested moving it from a species status to a subspecies, with the revised name of *Paeonia obovata* subspecies *japonica*. Currently, this is the accepted botanical name, although the name may change again to simply *Paeonia obovata*.



*Paeonia obovata* is the Woodland Peony I came to know several years later as a pink flowered form, pictured below following a rainstorm with *Gladiolus communis* subsp. *byzantinus*. As



previously alluded, it is very similar to its cousin. Native to Manchuria, Siberia, China and Japan, it was first described in 1859 by the Russian botanist Carl Johann Maximovich (1827-1891) from plants he collected in meadows of the Bureya Mountains north of Vladivostok. The species name refers to the obovate or egg-shape of the terminal leaflet.

Naturally, Maximovich was not the only botanist collecting plants and seed in

China. In fact, perhaps none was more famous than the British plant collector Ernst Henry Wilson (1876-1930) who had acquired the nickname of ‘Chinese Wilson’ from his numerous expeditions throughout China! Wilson collected seed of *Paeonia obovata* while traveling near Fang Xian in the Hubei Province at some point prior to 1916. The seed was distributed to individuals and nurseries that provided financial support for his expeditions. One such financier was Miss Ellen Wilmott (1838-1934), who had inherited the historic garden at Warley Place in Essex, England. Perhaps best known for *Eryngium giganteum* ‘Miss Wilmott’s Ghost’, she successfully germinated the seeds that proved to be dramatically different than the plants collected by Maximovich! Not only were the white flowers upwards of 1” larger, the leaflets were also significantly larger and exceptionally hirsute or pubescent on the lower surface. It was so unique that based on the seedlings Miss Wilmott grew, it was named *Paeonia willmottiae* in 1916 by the Austrian botanist Otto Stapf (1857-1933).

Clearly, there were several slightly different plants found and described by botanists over the years. Initially, the Japanese Peony was thought to be unique from *Paeonia obovata*, or at the very least a subspecies due to the white flower color combined with the shorter and more numerous stigmas. However, after extensive studies from 1985 to 1998 by the Chinese botanist De-Yuan Hong (1936-), the difference between the two plants became more clouded. For

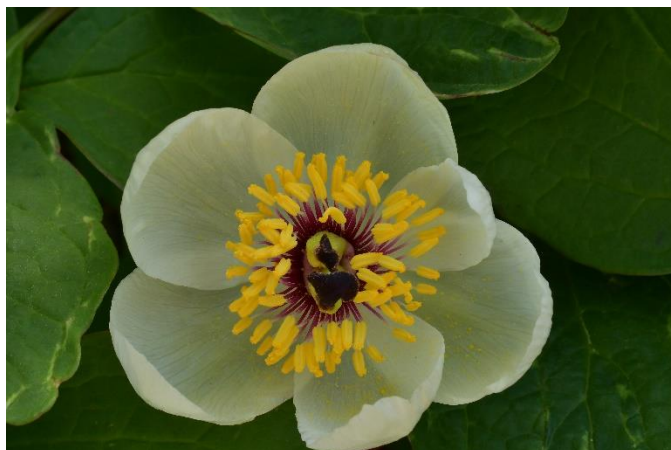
example, *Paeonia japonica* was supposed to be distinguished by a greater number of stamens as compared to *Paeonia obovata*. However, studies by Hong revealed populations of white flowered *Paeonia japonica* to have 70-230 stamens versus the pink flowered *Paeonia obovata* with 21-110. Although *Paeonia obovata* bore less of the male structures, there was still overlap. The same was true of the flower color, shape of the petals, the number of carpels and so on. What he did find of interest was the plants Wilson had collected in the more western regions of China. They were largely tetraploid in nature, essentially having twice the number of chromosomes as compared to those found in other areas with a pubescent underside to the leaf (as seen at right on a seedling at Willowwood Arboretum). This was in contrast to populations in northern, southern or eastern regions, where



plants were primarily diploid with glabrous leaves. His suggestion was to alter the nomenclature, removing the species of *Paeonia japonica* and creating two subspecies (abbreviated subsp.) named *Paeonia obovata* subsp. *obovata* and *Paeonia obovata* subsp. *willmottiae*.

What does all this mean for the plant? It has long been speculated that Woodland Peonies are very primitive. At some point millions of years past, two distinct species crossed, creating a rather variable new species in regard to both physical and genetic traits. Hence, the current confusion as to the proper botanical name for the Woodland Peonies. What does this mean for the gardener? Other than a little fun in knowing something more about the plant, very little since the names in catalogues will undoubtedly remain unchanged for years to come!

Most importantly, for the garden these plants bring great ornamental attributes in the spring and, unusual for Peonies, the fall. In my experience, the white flowered forms sold as *Paeonia japonica* are the first to appear in the garden, typically in mid-April but mid to late March is not unusual when nighttime temperatures in the low 20's! When the plants first appear, the back of the foliage is often an attractive soft maroon to red in color, as seen at right in mid-March. They quickly develop into a rounded plant close to 18" tall by 24-30" wide. Each stem bears several biternate leaves. A biternate leaf is divided into three leaflets, which in turn are further divided into three smaller leaflets or segments! These individual segments are lance shaped, becoming an attractive bright green come April and evolving into a grayish green come summer and fall. The leaves are not affected by powdery mildew as is typical for many Peony cultivars. In early to mid-May, flower buds emerging from the tip of the stems open into



highly attractive goblet-shaped blooms measuring upwards of 3" in diameter as seen below. They remain effective for 7-10 days. The sturdy stems readily support the flowers and staking is not necessary, even after heavy rains. The flowers are faint yet sweetly fragrant and are filled with numerous male stamens (100-280) that are tipped with yellow anthers. Adding to the drama is the reddish-purple color of the filament or stem of the stamens. In the plants I have seen the

filaments are white just below the anthers, transitioning to a dramatically darker purple near the filament's base. However, according to the studies by Hong, the color of the filaments can vary from white to green, purple and the bicolor forms I have seen. At the very center of the flower



are typically 2-3 seed bearing carpels, although it can be as few as one or as many as five. The fan shaped stigma at the tip of the carpel is an attractive deep purple.

Plants sold as *Paeonia obovata*, in my experience, start to bloom much later with stems sporting all green foliage appearing in late April and flowering in late May into early June. They mature to a slightly taller height of 18-24(30)'' by 30'' wide.

The leaves are similar to its cousin, although the apical leaf is supposedly more egg-shaped. The stems and leaves appear at an alarming pace and can shoot to their full height in a matter of days! The goblet-shaped flowers typically have mostly pink (as seen above) or pink and white striped floral petals (as seen in the closing image) with a ring of golden yellow anthers surrounding the central carpels. The stigmas are once again fan-shaped and purple. Interestingly, in the plants I have seen, the filaments are only white, lacking some of the drama of the purple filaments of the white flowered forms. I have yet to see the elusive subspecies of *willmottiae*, although a plant at Willowood Arboretum (pictured above) does exhibit pubescent foliage!



Following bloom for both 'types' of Woodland Peony, the fertilized carpels transition into swollen seed pods that often develop red or purple overtones by late summer and arch backwards, appearing much like a jester's hat as seen above. Rivealing the floral display, Woodland Peonies offer the addition of a very colorful autumn seed display. Along the top of the seed capsule is a maroon-colored suture line. Come mid-September the suture splits open, revealing a glossy, bright red interior with numerous contrasting dark purple seeds, as seen below right. Truly an incredible sight that lasts for well over a month! A few fallen seeds often escape predation and develop into new plants, although seedling production is far from prodigious. The seeds require two periods of winter's chill and will not germinate until the second spring after being shed, explaining in part why seedlings are not abundant.



When considering how to use the plants in the garden, the white colored forms look great combined with Rhododendrons and Azaleas, as the blossoms truly brighten the woodland floor and provide low mounds of clean, mildew resistant foliage. They also look great combined with blue, purple and white forms of Creeping Phlox (*Phlox stolonifera*), the white floral spikes of Foam Flower (*Tiarella cordifolia*) or the small stary white flowers of Sweet Woodruff (*Galium odoratum*). The pink forms look surprisingly good combined with the deep rosy-pink spikes of Byzantine Gladiolus (*Gladiolus communis* subsp. *byzantinus*) as seen prior or the rosy pink flowers of various hardy geraniums such as *Geranium macrorrhizum* (Bigroot Geranium).

As the name suggests, Woodland Peonies thrive in the partly shaded conditions of woodlands, where soils are rich in humus and are not inclined to dry excessively. Plants appreciate soils with a slightly acidic to neutral pH of 6.5-7.0 and are hardy in zones 5-7. The plants are very long lived, deer resistant and do not require division for thirty years or more. If you wish to divide the plants, late August and early September is the ideal time to lift and separate the thick, horizontal growing tubers and replant, making certain to place the growth buds or eyes close to the surface. It is important for sunlight to reach the eye, since it stimulates flower bud formation.

I have to admit, as a young gardener the fallen flowers of my mother's double peonies were an easy target for a lawnmower and I found the plume of petals spewing from the small push mower an entertaining bonus to the job. Feeling somewhat guilty all these years later, it is rewarding to know flowers of some peonies do not collapse following a rain! They also thrive in a woodland garden, far from a lawn mower's harm. For their ease of care, beautiful flowers and colorful fruit displays, Woodland Peonies are certainly underappreciated for the great seasonal drama they can add to your Garden.



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