By Any Name, *Ipheion* Brings Spring Color

Every year gardeners search for new plants with early spring color that have somehow evaded the vigilant eyes of their gardening friends. Truth be told, gardeners love a touch of friendly competition! Ideally, these new finds should provide more than just floral interest; they should be easily grown, long lived and – dare I say it – deer resistant! Truly a plant that would make a gardener green with envy. Oddly, one of my long-time spring favorites remains unknown by far too many and it is both easily purchased and inexpensive. The plant is Spring Starflower or *Ipheion uniflorum*, a bulb whose botanical identity has long perplexed botanists.

Ipheion, pronounced if-ē-on is a member of the subfamily Allioideae, which is found within the Amaryllidaceae or Amaryllis family. Allioideae is a well-recognized and fragrant subfamily as the name is derived from and contains the genus *Allium*, commonly known as onion. Currently, the genus *Ipheion* contains 3 species of bulbs native to Argentina into Uruguay. This unto itself makes the plant rather unique since most winter hardy bulbs originate from the mountainous regions bordering Turkey and into the Caucasus, not South America!

Ipheion uniflorum was originally found by the Scottish gardener and botanist John James Tweedie (1775-1862) who was among the first to botanize Argentina after its independence from Spain. Tweedie became the head gardener at the Edinburgh Botanic Garden and at the age of 50 he opted to search for new plants in South America versus enjoy a comfortable retirement. Arriving in Argentina in 1825, he started his plant expeditions in earnest in 1832 on an expedition along the Uruguay River. Although he never returned to Scotland, he continually sent seed and plants back to England throughout his 30+ years in South America. Whether from the expedition in 1832 or from prior unrecorded trips, the bulbs arrived in England and were first classified in 1833 by the Scottish physician and botanist Robert Graham (1786-1845). Graham placed the plant under an existing genus named *Milla* and provided the species epithet of *uniflorum*, describing the presence of only one flower per deep red stem, as seen above. I might note that this was the only aspect of the bulb's botanical name to remain constant over the next 175+ years!

In 1836 the French botanist and zoologist Constantine Samuel Rafinesque (1783-1840) disagreed with Graham's placement of the plant within *Milla* and penned a new genus named *Ipheion*. Rafinesque was a brilliant, self-taught authority on a number of topics and although he was a prolific

writer, he never revealed the inspiration for the genus name. The pungent fragrance of the foliage may have been the directing force of the name, as it may have come from *Iphyon*, a name the Greek botanist Theophrastus (c. 371 – c. 287 BC) gave to Lavender or from the Greek *Iphios* for strong, mighty or stout! If only the plant retained this genus name, it might be better known today, but that was not to be its fate! It was only a year later in 1837 that the English botanist John Lindley (1799-1865) published the plant under the name *Triteleia uniflorum*, the name by which I learned the plant in the early 1980's. The name is from the Latin *Tri* for three and the Greek *Teleios* for complete or perfect, describing how the floral parts are arranged in perfect or consistent multiples of threes, as seen in the image above at right. It should be noted that none of these botanists actually saw the plant in its native environment but worked from samples sent to England. Unfortunately, the name of *Ipheion* vanished for well over a century as indecision over the name continued.

Paralleling Tweedie's exploration of Argentina, the German botanist Eduard Friedrich Poeppig (1798-1868) was botanizing throughout Chile, Peru and Brazil. In 1833 he came upon a bulbous plant featuring 3 nectar drops on the ovaries. This distinguishing feature led to the penning of the genus *Tristagma*, from *Tri* for three and the Greek *Stagma* meaning something that drips. Jumping forward to 1963, indecision remains over the proper genus name of Spring Starflower. The American botanist Hamilton Paul Traub (1890-1983) who specialized in Amaryllidaceae, shifted Spring Starflower to the genus *Tristagma* based upon genetic analysis. This shift was relatively short-lived, as in 2010 many authorities determined the shift inappropriate for three of the species including *Ipheion uniflorum* and they were placed back under *Ipheion*. The confusion confronting the gardener lies with some authorities still accepting the genus name of *Tristagma* and retail catalogues offering the bulb under *Ipheion*, *Triteleia* or even long discounted names such as *Brodiaea*! Is the ever-shifting name game now concluded? Only time will tell, but it certainly comes as no surprise why gardeners might have trouble recognizing and purchasing this bulb!

The plants are actually one of many great bulbs found under the title of 'minor bulbs', which refers to the thumbnail size of the bulb rather than its floral impact. It is also a true bulb in the botanical sense, as it consists of layers of modified leaves as is typically seen when an onion is cut in half. I first discovered this plant near the start of my career and was intrigued at how the matt green and somewhat flattened 8-12" long foliage would appear in November (pictured at left) and weather the Northern New Jersey winters. I also recall how I was convinced there was a skunk nearby one November while I raked fallen leaves that had settled atop the *Ipheion* foliage. Never suspecting the strong scent came from the bulb's foliage, it took several more years of leaf raking before I finally realized the source of the scent! To the benefit of the plant and the gardener, the scent significantly reduces the chance of deer predation.

Come late March through late April, the plant not only pushes additional foliage, but a wonderful carpet of light blue flowers. In stark contrast to the scent of the foliage, the flowers have a honey-like sweet fragrance. Each flower is close to 1" in diameter and as the common name implies, they appear like a small star. Flowers appear singularly on 5-10" tall scapes that emerge from the leaf axils. Like many early blooming bulbs, the flower consists of an inner ring of petals and an outer ring of modified leafy bracts that appear identical to the petals. Visually indistinguishable, they are referred to as tepals. The 1¾" long tepals are fused over the lower ½ of the flower forming a lower or basal tube. When the bud is viewed from the side (as seen in a flower of 'Wisley Blue' above), the lower portion of the tube is light yellow transitioning to a light blue at the point where the tepals reflex and form an open flower. Also seen along the outside of the flower and extending from the base to the tip of the tepals is a central, dark maroon stripe. As the flowers open, the tepals reveal an icy blue color on the inside, typically blushed darker blue towards the tips. The dark blue line on the outside of the tepals appears as a light blue stripe on the inside, most likely serving as a nectar guide for pollinators. At the flower's center are 6 attractive orange anthers that contrast nicely with the blue tepals (as seen at the articles' end). Three of the anthers project slightly above the opening of the basal tube while the remaining 3 lie further below and within the tube. Following the ripening of the anthers, a single white, 3 lobbed female stigma extends upwards, appearing just above the basal tube.

The color of the tepals and the size of the anthers does vary, especially among the named cultivars. The selection 'White Star' (pictured above) has large, nearly white flowers while 'Wisley Blue' has a slightly deeper blue appearance than the straight species. 'Jessie', as seen at left has probably the deepest blue coloration of any of the selections. 'Jessie' is also of interest since the tepals are strongly

reflexed while the bright orange anthers are not only larger, but project further above the basal tube. A most attractive color combination.

Spring Starflower is also very easy to grow and is amenable to varying soil conditions. From the notes that Tweedie took during one excursion, he described how the plants grew on dry slopes. However, I have seen them growing robustly in silty, moisture retentive soils in NJ as well as in well-drained soils of a rooftop garden in Raleigh NC and loamy soils in Atlanta GA. They grow well in full sun as well as providing much needed spring color under still dormant deciduous shrubs. They can also be planted into lawns. They are good for providing an early food source for bees. Come fall, 5-10 bulbs should be placed an inch or so apart in a 2-3” deep hole. Best planted in mass, nothing looks lonelier than a single flower from one bulb. Fortunately, they multiply rapidly through offsets and quickly create a sizable colony. Once established, the plants can easily be moved about through division before the foliage goes dormant in late May.

Not surprising, many plants lack easy recognition among gardeners based on their hard to decipher botanical names. Often, they are too challenging to pronounce or the names of the genus and species simply do not make sense. Perhaps even more challenging is a plant whose name changes frequently with the years, making it a true challenge to remember. By whatever name you choose, Spring Starflower is a dependable and inexpensive bulb providing sweeps of fragrant spring color that simply begs to be added to more NJ gardens.

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