

Grape Hyacinths – Time for a Fresh Look

At no fault of their own, some plants develop a love/hate relationship with gardeners. They are very deserving garden plants, yet after years of being heavily used our interest in the plant simply dwindles. We also fail to take note of any new and interesting selections, as we peruse nursery lists. For me, Grape Hyacinth or *Muscari*, as it is known botanically typifies this problem. Each year I devotedly read the bulb catalogues for interesting new selections and always passed over *Muscari* since I know what to expect. Recently, I started to take notice of some exciting new species and selections that have proven to be more than garden worthy!

Unlike many plants we call bulbs, *Muscari* species grow from a true bulb composed of modified leaves as opposed to the modified stems of corms and rhizomes. They were originally placed within the Hyacinthaceae or Hyacinth Family but are currently in the Asparagaceae or Asparagus Family. There are presently 79 species found in the genus, many of which are difficult to discern owing to the minor differences between species. Collectively, they are native to Southwestern Asia, Northern Africa and Southern Europe. The French botanist and gardener Charles de l'Ecluse, better known under his Latin name of Carolus Clusius (1526-1609) is believed to be the first to describe a plant and assign the name of *Muscari* in his 1583 publication entitled *Rariorum aliquot Stirpium per Pannoniam et Austriam Observatarum Historia (The History of Several Rare Species Observed Throughout Pannonia and Austria)*. The genus name most likely stems from the Greek *Muskhos* for 'musk' in reference to the musky sweet fragrance of the flower. The Swedish botanist Carl Linnaeus (1707-1778) lumped the plants within the genus *Hyacinthus* in 1753, although he was clearly influenced by Clusius when he named *Hyacinthus muscari*, which is currently *Muscari racemosum*. The genus name of *Hyacinthus* was quickly altered by Philip Miller (1691-1771) in 1754, who properly described and published the genus as *Muscari*. Miller was a well-respected botanist and the Head Gardener at the Chelsea Physic Center for 49 years. The common name of Grape Hyacinth was inspired by the resemblance of the open flowers to a cluster of grapes and the similarity to Hyacinth flowers!

The most dominant species in the trade is *Muscari armeniacum* (pictured above in flower and at right in foliage). Native from Greece and Turkey, east to the Caucasus, the species name alludes to Armenia, yet another native provenance. The plant was initially yet, invalidly described and named around 1876 by the



German Botanist Maximilian Leichtlin (1831-1910). Leichtlin was fascinated with the cultivation of bulbs and is honored by *Camassia leichtlinii* among many other bulbs. In 1878 it was properly authored by the English botanist John Gilbert Baker (1834-1920). The bulbs produce somewhat flat and fleshy foliage, usually 8-12" long by ¼" wide, although widths of up to ½" appear on occasion. The rather floppy foliage begins to appear in late October and remains throughout the winter and spring until late June. The image above right illustrates the rather untidy nature of the foliage in December. In mid to late March, each bulb produces 1-3 floral spikes or racemes that appear from the base of the foliage and elongate to 6" tall. The upper 2-3" of each floral stem or peduncle is densely covered by 20-40 dark violet-blue flower buds, which slowly open from the base upwards (as pictured at right). The uppermost buds are



sterile and are slightly lighter in color. These sterile buds develop their mature color as the initial and lowest tier of blooms open for pollination and retain their color until the last ring of florets open. They never actually open and their 'mission' is to attract pollinators over the month-long bloom period since the lower, fertile flowers may not be noticeable amongst surrounding vegetation.

The individual fertile flowers are composed of 6 fused tepals that form an oval, balloon-like structure. When the petal and the surrounding leafy calyx of a flower look identical, they are termed tepals. Initially, each bud is oriented outward or upward on the raceme. As the floret starts to open, the pedicel or floral stem for each floret elongates, allowing the raceme to become more open in appearance. It also allows the floret to become more

pendant. This downward orientation of the florets serves to protect the stamens and pistil from rain and frosts. The tips of the tepals flair outwards at the base and turn white as the flowers open, reverting back to blue as the floret fades. The white rim highlights the floral entrance while informing pollinators the anthers and stigma are mature. Following pollination, 3-chambered seed capsules develop with each capsule releasing upwards of 6 seeds in June. I have yet to see a seedling, although the plants will increase very willingly from offsets.

Muscari armeniacum has several light blue-flowered selections that are very admirable. 'Valerie Finnis' is a selection named for the plantswomen and garden photographer Valerie Finnis (1924-



2006) and is pictured above left. It was purportedly bred by her mother and named in her honor. Should you be looking for a selection with icy blue fertile florets and nearly white sterile florets, consider the 2011 introduction named 'Peppermint', pictured above at right. As the name suggests, the cultivar named 'Alba' has all white florets.

From my experience, of the species available in the trade this species and *Muscari neglectum* 'Baby's Breath' (see below) produce and display foliage from fall through late spring, although I am sure there are many more! Initially I found the foliage as a distraction to the garden's appearance, but I now find the foliage an interesting point of winter interest, so long as the masses are not too large or intermingled with similar foliage such as sedges (*Carex* spp.). The



more lax *Muscari armeniacum* foliage gives the illusion the typically stiffer foliage of the *Carex* is somehow diseased. By contrast, I do enjoy mixing species without evergreen foliage with *Carex* species!

If the winter foliage proves to be too distracting for the garden consider *Muscari latifolium*, the Broad-leaved Grape Hyacinth. The species epithet echoes the common name as it comes from the Latin *Lātus* meaning broad and *Folium* meaning leaf. It was named and described in 1860 by the British physician and naturalist John Kirk (1832-1922). It is principally native to the dry pine forests of southern and western Turkey at elevations of 3,500-6,000 feet. The plants produce one or occasionally two leaves in early spring that can reach 8-10" tall by 2" wide. As the leaf emerges from the ground, it is rolled along its length and provides a protective 'coat' or tube for the flower raceme within (as seen above as the leaf unfurls). The upper portion of the leaf is medium green in color while the base has orange to red hues. The floral stem is also red in color. As the leaf and flower raceme continue to elongate, the unfurling leaf allows the floral stem to rapidly grow and extend above the leaf. The flower raceme ultimately reaches 10-14" tall with the uppermost 1-2 ½"

wrapped in flower buds. The lower fertile florets display a much deeper purple coloration than its Armenian cousin and the sterile florets atop are an attractive light blue, creating a beautiful two-toned effect (as seen above and in the closing image). When inspected closely, the purple fertile florets are beautifully brushed with rosy violet strokes. I have noticed the plant slowly spreads through offsets and seedlings, as seen in the closing image.

If you are looking for a fun and different color combination, consider *Muscari latifolium* 'Grape Ice', pictured at right. The lowest two whirls of florets are deep purple, while the remaining fertile and sterile florets are a clean white. Adding to the detailing, the tips of the white fertile florets are blushed yellow.



A very attractive plant for locations, such as along the top of a wall where the details can be appreciated!

Another selection that has recently become available in commerce is *Muscari neglectum* 'Baby's Breath'. The species epithet means that it is an overlooked or forgotten species, something we certainly wish to curtail! The plant was originally and incompletely described by the Italian botanist Giovanni Gussone (1787-1866). In 1842 it was properly described by the Italian botanist Michele Tenore (1780-1861), who happened to be Gussone's former supervisor and colleague. The species epithet is perhaps a reference for how the plant propagates mostly unseen through offsets of the bulbs. It could also be a reference to how the species was often confused with *Muscari racemosum* – the plant Linnaeus originally named *Hyacinthus muscari* – and was overlooked by authorities as a separate species until much later! Commonly known as the Common or Starch Grape



Hyacinth, this species has dark purple flowers but otherwise, is similar in appearance to its Armenian cousin. 'Baby's Breath', as seen above is a cultivar with light blue yet slightly darker florets when compared to the afore mentioned *Muscari armeniacum* 'Peppermint'. Registered in 2004, this selection produces bold and attractive foliage (also seen above) in the fall that holds up well to below zero winter temperatures and provides a lush backdrop in spring!

Most recently, a 'new' species has appeared in the marketplace for gardeners that is often listed incorrectly as *Muscari paradoxum* (pictured at left). Its correct name is actually *Bellevalia pycnantha*, although it has undergone numerous permutations and the plant appears in the trade under nearly all these permutations! Initially it was named *Hyacinthus paradoxus* in 1835 by the Russian botanists Friedrich Erns Ludwig von Fischer (1782-1854) and Carl Anton von Meyer (1795-1855). In 1849 the name was shifted to that of *Muscari paradoxum* by the German botanist Karl Heinrich Emil Koch (1809-1879). Oddly, in the same year Koch added to the confusion when he described and named what he believed to be a new species by the name of *Muscari pycnantha*. Unfortunately, this plant was in fact *M. paradoxum*. Regardless of the two species being the same plant, the name of *Muscari pycnantha* was accepted and in 1935 it was altered to *Bellevalia pycnantha* by the Russian botanist Agnia Sergejevna Losina-Losinskaja (1903-1958) and remains the proper name to this date. However, what happened to the afore mentioned *Muscari paradoxum*? In 1882 the Swiss botanist, mathematician and explorer Pierre Edmond Boissier shifted *Muscari paradoxum* to *Bellevalia paradoxum*. Confused yet? As fate would have it, *Bellevalia pycnantha* is available in the trade under both species for *Bellevalia* and for *Muscari*. This makes it very difficult for the perplexed gardener,

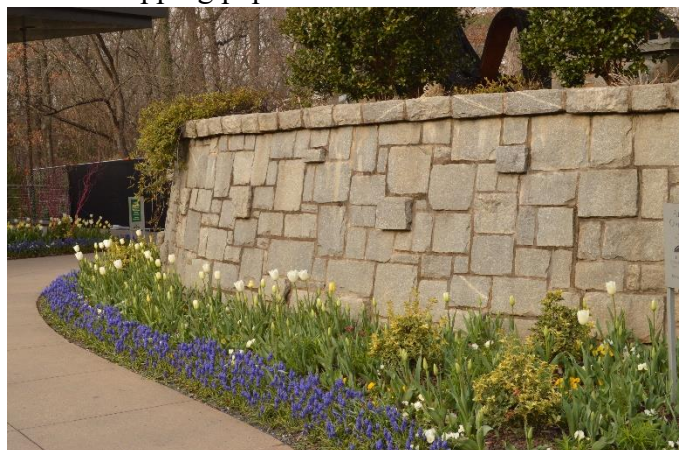
such as myself, when trying to design a spring planting when 1 bulb can be purchased under 4 different names!

Bellevalia species look similar to those of *Muscari*, although few of the approximate 65 species found within the genus are deemed ornamental. They too go by the common name of Grape Hyacinth with species native from Turkey and Israel east to Iran, Afghanistan, Pakistan and Georgia. Although Boissier and Losina-Losinskaja ascribed the genus name in 1882 and 1935 respectively, *Bellevalia* was first published in 1808 by the French naturalist Philippe Picot de Lapeyrouse (1744-1818). The genus name celebrates the French botanist Pierre Richer de Belleval (1564-1632) who created the first botanical garden in France named Jardin des plantes de Montpellier.



As the number of Russian Botanist involved with describing the plant foretells, *Bellevalia pycnantha* is native to Eastern Turkey into Georgia. Each bulb usually produces 3 strap-like leaves in spring, growing to 10-12" tall by 1" wide along with several floral racemes (as seen above). The flower racemes reach a somewhat shorter height of 8-10" and are very effective. Each raceme initially displays 35-60+ tightly packed florets that become more loosely arranged as the florets open and the individual floral pedicels lengthens, allowing the floret to once again dangle downward. The dense arrangement of florets was the inspiration for the species epithet of *pycnantha*, which comes from the Greek *Pycnos* for crowded and *Anthos* for flower. Unlike *Muscari*, these florets are campanulate or bell-shaped rather than oval or balloon-shaped. This may have been the inspiration for the species name of *paradoxa*, which botanically speaking means puzzling or unusual. The dark purple, almost black florets are definitely worth a close inspection since the tips of the tepals and the anthers within are a beautiful and contrasting light yellow, as seen in the image above. It is also enjoyable to see how the ends of the tepals fit tightly together before popping open, similar to the wrapping paper of a 6-sided box! As expected, the terminal flowers on the racemes remain closed and retain their color until the last of the larger subtending florets open.

Muscari armeniacum has classically been used as an edging plant, as seen at right at the Atlanta Botanical Garden. The challenge for the gardener is how to distract everyone's attention from the mass of rather lax foliage when not in bloom!



All the species look great intermingled with spring bloomers such as *Phlox subulata* or *Phlox stolonifera*, underplanting the yellow flowered *Disporum flavens* or, for those without evergreen foliage, intermingled with the shorter sedges such as *Carex rosea* and *Carex albicans*. *Bellevalia* is usually still in bloom when the blue flowered *Iris cristata* appears in late April and makes for a beautiful pairing. They can also underplant much larger perennials, such as Bush Clover (*Lespedeza thunbergii*) and Compass Plant (*Silphium laciniatum*) whose foliage and stems appear later. Or, consider underplanting the yellow flowered species of Winter Hazel (*Corylopsis* spp.). I prefer to place several bulbs in a hole that is 3-4" deep, as it will provide a more impactful display come spring. The bulbs will also increase in number from offsets and have proven to be very long-lived additions to the garden. All species of *Muscari* and *Bellevalia* enjoy full sun or dappled shade in well-drained soils. Bulbs are pH adaptable, but flourish best in neutral or slightly alkaline soils. All are hardy in zones 5-8 although some resources incorrectly list *Bellevalia* as only hardy to zone 7.

Without question, some plants conjure up thoughts of only one species or selection, and we dismiss the genus as 'seen that, done that'. We fail to investigate whether new selections have been added for a more diverse planting palette. The various selections and even genera that now fall under the heading of Grape Hyacinths provide a refreshing and fun palette of colors that were not available just a few years ago. Indeed, it is time to give them a fresh look this fall when planning your spring garden to come!



Bruce Crawford

Manager of Horticulture, Morris County Parks Commission