The Mysterious Baker of Ghent: Mysteries of Monsieur Mortier and the First Ghent Hybrids

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The mysterious baker of Ghent Mixed a flame with a swamp and then went And stirred in some Pontic And some say Piedmontic Oh, what a sight and a scent!

Introduction

In a two-part article, we will first review what little information was commonly known for almost 200 years about the breeder of the first successful deciduous azalea cultivars and his hybrids. In the second part, we want to spread the word on who this man really was, this mysterious P. Mortier, a baker of Ghent.

Ghent Hybrids Began with P. Mortier

Ghent Hybrids are the first successful deciduous azalea hybrids to be developed. These hybrids originated early in the 1800s in Ghent, Belgium with a man known as P. Mortier. For two centuries, we have known almost nothing about this man, not even his first name.¹ It was as if a veil had been placed over the man and his work, obscuring details. Is it not puzzling that no one in all these years was interested enough to discover more about this man himself? We do not know when he began breeding azalea hybrids. We do not know for certain the actual species he may have used in his breeding program. We do not know which of the early known cultivars were his creations. When the curious take some effort to learn what is published about Mortier, they soon find that a sentence or two is all that is available.

Multiple records tell us that he was a baker by trade, but nothing was reported about his bakery. We know he liked plants and flowers, especially azaleas. He seemed to have done what no other hybridizer had done up to that point in time: he managed to cross late-flowering deciduous azaleas with early-flowering ones. The deciduous species, those from North America and the one from the Pontic Region of Eastern Europe, have a diverse range of colors from whites to pinks and from yellows through oranges to deep reds. Some have blotches, and some are fragrant. Mortier may have crossed several of the Americans and added the Pontic azalea to the mix in his horticultural experiments to produce a dramatic array of color combinations never before seen. Over the last 200 years, that is about all we have learned of P. Mortier. There, in the small scraps of horticultural history, his personal story ended. Yet, this mysterious Mortier lit the fuse for a colorful explosion: the early hybridization of deciduous azaleas.

Early Hybridization

Horticultural hybridization was in its infancy in the eighteenth century. Thomas Fairchild, a Hoxton nurseryman, took a feather and dusted the stigmas of carnation (Dianthus caryophyllus) with pollen from the flower of Sweet William (Dian*thus barbatus*). The resulting seedlings had pink double blossoms like the carnation but with clustering heads like sweet William. This revolutionary experiment in 1716 drew the attention of some members of the Royal Society of London, and in 1720, Fairchild's hybrid was presented to the society. Fairchild, however, panicked and claimed the hybrid was accidental, that the plants had pollinated themselves. You see, Fairchild feared for his soul. While he understood the relatively new sexual theory of plants, the contemporary belief was that God created all plant species. Was Fairchild playing God? When Thomas Fairchild died in 1729, he bequeathed $\pounds 25$ to his parish church, St. Giles, Cripplegate, to preach "annually forever" a sermon "on the wonderful works of God in the Creation." The Fairchild Sermon continues to this day.²

Nurserymen soon overcame their fear of offending God and began experimenting with plant hybridization. European gardening began to flourish, with nurseries offering exotics from all over the world and new man-made hybrids. On the Continent, people in the Low Countries, with their relatively mild climate, began cultivating exotic plants and showed a great interest in botanical novelties. Ghent, Belgium, an old town on the Scheldt River, between Brussels and Bruges, was for a time under French control and for a time part of the Kingdom of the Netherlands. Ghent established a horticultural industry and became a flower capital, in large part by efforts of the Royal Society for Agriculture and Botany in Ghent. Students of English history know that Britain and the United States agreed to end the War of 1812 with the Treaty of Ghent (24 Dec 1814).³

As early as the seventeenth century, the bishop of Ghent, Antoine Triest, was a supporter of horticulturists. By the end of the eighteenth, Ghent had begun its own botanical garden, founded by Bernard Coppens and Charles Van Hulthem (1764-1832) as Napoleon Bonaparte was assuming power in France. Napoleon had no interest in flowers or gardens, and he planned to convert the new Ghent Botanical Garden into a military post. Van Hulthem petitioned Josephine, and the garden escaped destruction. At the beginning of the new century, the flower trade was small, but it grew. Ghent became a major center, first mainly with roses, camellias, then expanding to azaleas, orchids, begonias, and other plants. The passion for exotic flowers led to the creation of the Ghent Society of Agriculture and Botany in 1808. The society held their first flower and plant exhibition in 1809, expanding to become the Ghent Floralies. The Ghent Floralies has become the largest flower show in the world, now held every five years. Even in the first years, it became widely known. Thomas Jefferson, John Quincy Adams, Henry Clay, Albert Gallatin, Benjamin Smith Barton, William Bartram, Henry Muhlenburg, Stephen Elliott, David Hosack, Frederick Pursh, and François Andrè Michaux were at one time exhibitors, among many other well-known individuals.⁴

Who Was P. Mortier?

Mortier was a charter member of the society, listed among 47 founding members as "*P. Mortier, amateur fleuriste* [florist]" and was one of the judges



for the spring 1816, winter 1818, spring 1819, and winter 1820 expositions. He exhibited a wide variety of plants from 1809 until 1817, including Arbutus, Azalea, Camellia, Cassia, Citrus, Clematis, Correa, Cunila, Cyclamen, Digitalis, Erica, Ficus, Gardenia, Glycine, Hakea, Hydrangea, Jasminum, Leptospermum, Paeonia, Pelargonium, Pyrus, Rosa, Solanum, Stachys, Tulipa, Tropaeolum, Viburnum, and Westringia. Mortier displayed an Azalea nudiflora (now Rhododendron periclymenoides) in February 1810 and an A. viscosa (now *R. viscosum*) in June 1816. His double white *Camellia floro albo pleno* was the best cultivated flowering plant at the Ghent winter festival in 1811. Another Camellia japonica received honorable mention in February 1813 as did his *Paeonia* suffruticosa in February 1815. He was said to be an honest baker, with a passion and zeal for horticulture that made him an excellent observer. He was involved in the early development of what became the Belgium graft for propagating camellias. In more recent thesis research of exotic plants in Ghent in the first half of the 1800s. Mortier is identified as one of 13 main professional growers in the first decade of the 1800s, but he considered himself more of an enthusiast. His name is listed on some of the daily sales sheets of the Frascati Inn in Ghent as seller and buyer. This establishment was an early form of a garden center where plants were auctioned. On several sheets in 1808, we find him identified as Pierre Mortier, baker, of Hoogbrugge. Recently, we found Mortier's first name in another obscure place. In the Royal Society secretary's extract from the meeting of 6 Feb 1811 where Mortier's award was noted, he was identified as "à Mr Pierre Mortier. Fleuriste en cette Ville [florist of this city]." These references in the horticultural records with his first name obviously have been overlooked since.⁴

So you want to learn more about the lovely Glenn Dale Hybrid Azaleas? **The Azalea Works** in Bethesda, Maryland, has two books by Bill Miller and the late Dick West which detail the fascinating story about B.Y. Morrison, the 454 Glenn Dale cultivars, and the unpublished PI and Bell Numbers by which they were managed. For details, see the website at: **www.theazaleaworks.com** While you're at it, visit the extensive collection of

azalea, companion plant, and animal jpg images.

Deciduous Azaleas in Ghent

Deciduous azaleas appeared in Ghent early in the 19th century. Nurseries around Ghent had access not only to some of the North American azaleas but also to the Pontic azalea of the Caucasus (A. *pontica*, now *R. luteum*). In the nearby village of Wetteren were the established gardens of Monsieur Hopsomere and of Viscountess Vilain XIV, both of which had many American plants. These gardens were known to have collected both North American and Pontic azaleas. Local Ghent newspapers first show sales of azaleas in Ghent in April 1805. These were A. pontica and A. aurantia (R. calendulaceum). In 1806, A. cocchinia (possibly *R. flammeum* or *R. calendulaceum*) and *A. pontica* were offered. In 1807, we see A. nudiflora and A. *viscosa* in sales. The first A. calendulacea (now R. calendulaceum) did not appear in exhibition until February 1817, but an A. nudiflora var. aurantiaca, which may have been a R. calendulaceum, appeared in 1809. In the history of the Ghent Society, we find that some members of the society visited horticultural establishments in England and brought back plants from all parts of the world. Mortier is specifically named as one of the early visiting society horticulturists. Jean Henry Mussche published Hortus Gandavensis in 1817. This document contains a list of all the plants in the botanical garden in Ghent at that time. A. pontica was listed. The American species were A. nudiflora, A. calendulacea, and A. viscosa. Mussche listed the species plus nine varieties for A. nudiflora, including coccinea, aurantia, and bicolor. Those varieties may have been R. flammeum, R. calendulaceum, and R. canescens. He included six varieties for A. viscosa. For A. calendulacea, he included one, *crocea*, the yellow one.⁵

A group from the Royal Caledonian Horticultural Society in Scotland visited Ghent in 1817 and in the garden of a Monsieur de Wulf, the owner of a boarding school for young gentlemen, saw a Pontic azalea that Wulf had procured, which he called variety *tricolor*. The striped flowers were yellow, pink, and white. Pink and striped are not characteristic of the yellow-flowered Pontic azalea. The supplier of Wulf's plant is unknown. One possibility is that this hybrid may have been one of Mortier, and Wulf's boarding school may have been a bakery customer of Mortier. "*J. B. de Wulf, instituteur* [teacher]" was an early member of the society.⁶ Frederick Street estimates Mortier's pioneer breeding work ranged between 1804 and 1834. Frederic Lee gives beginning dates from the 1820s. Trees and Shrubs Online suggests Mortier made his crosses in the 1820-1830s, and his plants soon entered the trade, reaching Britain by 1831. Clement Gray Bowers specifically states that Mortier produced his first hybrid in 1825. We shall see from contemporary newspaper evidence that Mortier, while advertising other plants earlier, began promoting azaleas at least by 1820, with no indication of whether these first advertised were his own hybrids. Charles Van Geert, the well-known horticulturist and nurseryman from Antwerp, wrote in 1835 that it was Mortier who raised the first Ghent Hybrid, and teasingly added, without leaving any list of cultivars which were Mortier's, that he raised "nearly all the superb varieties which are now disbursed and cultivated so extensively through Europe." Early evidence suggests that most of his hybridization work occurred during the 1820s. By 1834, Mortier was retired, not only a retired baker, but a retired azalea hobby-hybridizer, renowned for his work.⁷

How Did Mortier Cross Early and Late Blooming Plants?

What we actually "know" of Mortier's hybridizing comes from the writings of five near contemporaries of Mortier: Louis Van Houtte, Jan Van Geert, Dieudonné Spae, Frans de Potter, and Hubert Jean Van Hulle. Later writers repeated their information with occasional additional conjecture. These early horticultural writers credit Mortier as the first to discover a method to cross azaleas that bloom at different times and as the originator of the Ghent Azaleas, the first successful group of deciduous azalea hybrids. Subsequent hybridizers had an easier job, especially if Mortier's multigenerational seedlings used in follow-on crosses bloomed more closely together. Louis Van Houtte said that Mortier "proceeded mysteriously" and "married clandestinely." At one point, Van Houtte stated that the earlier varieties were used to fertilize the late varieties, and at another, he named the late-blooming A. calendulacea as the pollen carrier. Dieudonné Spae reported that "He had the ingenious idea of delaying the earliest flowering varieties, of crossing them with late flowering varieties," without saying which was the pollen parent. Frans de Potter tells us that Mortier "brushed them both," and Hubert J. Van Hulle that he "had the idea of delaying the varieties with early flowering, very often surprised by the spring frosts, and of fertilizing them with the varieties with late flowers." None of these writers, contemporaries of Mortier, explained how Mortier delayed, forced his plants, or saved pollen.⁸

The early hybridizers crossed deciduous azaleas by simply taking pollen from stamens of one azalea in flower and placing it on the stigma of another azalea simultaneously in flower. At this early stage, hybridizers did not know how to preserve pollen, nor have the means. Unless stored dry and frozen, pollen will only last several days. It is doubtful Mortier stored pollen. Hot-houses and orangeries, especially with the use of ovens, could keep temperatures up, break dormancy, and hasten flowering. Mortier was a baker, and, as early as 1815, he was one of only 13 gardeners in Ghent known to have a greenhouse or orangery.⁹ Ice houses to store natural ice were then almost non-existent in Europe. Early in the 19th century, Europe did experience some cold winters, and waterways of the Scheldt River may have frozen. Root cellars could also be used to keep ambient temperatures down and retard bloom. Would Mortier have been so ingenious as to collect and store ice in something like a root cellar?

What Species Were Involved?

The original assumptions were that Mortier took the flame azalea (*R. calendulaceum*), the Pontic azalea, and some of the others and used the best seedlings from his initial crosses for further hybridization. They mostly assumed they were dealing with the Pontic azalea and, as far as the North American azaleas were concerned, with forms of the pinxterbloom (*R. periclymenoides*), swamp azalea (*R. viscosum*), and flame azalea. Spae, only 12 years after Mortier relinquished his last seedlings, wrote

... everyone knows the species that were originally cultivated in our collections; we are talking about *azalea viscosa, nudiflora, pontica,* and *calendulacea.* These plants, introduced among us at the end of the last century, first produced a large number of varieties which, crossed between them, in turn gave new varieties.... However, all these various varieties do not come close to what has been obtained since. It was reserved for a horticulturist from Ghent, Mr. P. Mortier, to make us produce flowers of various colors and shades all different from what we already had. Spae and the others did not actually know what Mortier's pollen and seed plants were. Van Houtte said that Mortier "married clandestinely." Wilhelm Focke, in his book on hybrids, agreed with the four species and added, "It is unquestionable that those four species breed without appreciable loss of fertility in each ways to cross with each other." Unquestionable? The website *Trees and Shrubs Online* states, "Which American species were used is not known, but *R. calendulaceum, R. periclymenoides*, and *R. viscosum* were certainly among them. Some [of his hybrids] may be purely American in parentage, especially the later flowering sorts." Certainly?¹⁰

Looking back, unlike *Trees and Shrubs Online*, we do not know for certain what species were actually involved in Mortier's crosses. Two major issues exist with the species assumed in previous reports. (1) The North American species were poorly identified, and (2) contrary to the "unquestionable" confidence of Focke, not all American azaleas can always be crossed with each other as seed or pollen parents. Further, we are unsure when Mortier hybridized with the Pontic azalea relative to his hybridization of the flame azalea with other American azaleas.

Knowledge of deciduous azaleas was not what it is today. Many of our species reached Europe through John Bartram and others. These species were not yet well identified. The horticulturists and florists at that time thought they were dealing with three species when fourteen eastern North American species potentially could have been involved. Many unusually colored, once-named varieties of *A. nudiflora* are now considered to be R. flammeum, R. calendulaceum, R. austrinum, or R. alabamense. In addition, the pinxterbloom, the Piedmont azalea (R. canescens), the roseshell azalea (*R. prinophyllum*), and even the pink forms of the Florida azalea (*R. austrinum*) and Red Hills azalea (*R. colemanii*) have been confused. Thus, Mortier and his fellow plantsmen might assume a pink azalea to be the pinxterbloom that today we would consider another species, such as the Piedmont azalea, Florida azalea, or Red Hills azalea. The latter two can be pink and are tetraploid and may have been in Europe posing under other names. The diploid Oconee azalea (R. flammeum) and tetraploid flame azalea have been confused. The tetraploid coast azalea (*R. atlanticum*) was long mistaken for both the diploid swamp azalea

and at times the pinxterbloom. Further, early nineteenth century nurserymen had not seen the depth of colors and wide variety that do exist within North American species and their natural hybrids. Evidence also suggests they did not have the best examples of North American species to work with. Ghent nurserymen knew nothing about the genome and ploidy. All they knew is that Mortier's results were new and exciting.¹¹

In his hybridizing experiments, Mortier had to overcome unknown difficulties. Not every deciduous azalea will cross with the others. We now know most deciduous azalea species have two sets of chromosomes (diploids). A few have four sets (tetraploids). Almost all species with the same number of chromosomes will cross with each other. A tetraploid species with twice the usual number of chromosomes will almost never accept pollen from a diploid species, yet a diploid species cross will accept pollen from a tetraploid species. The important catch is that resulting triploid seedlings (diploid × tetraploid = triploid) are usually sterile, presenting a dead-end for further hybridization. Only on very, very rare occasions, will a triploid be fertile. Thus Mortier, with no knowledge of ploidy and its effects on hybridization, had to use trial and error to determine which crosses would work and which resulting seedlings were useful (fertile as well as with attractive features) in subsequent crosses.

Alfred Rehder and Clement Gray Bowers considered the typical and historic hybrid form known as Mortieri (or Morterii) as a cross between the flame azalea and the pinxterbloom, with the possible inclusion of the Oconee azalea. In Bowers' opinion, it was Mortier's later crosses that involved the Pontic azalea. Walter Schmalscheidt appears to agree. The earliest record we have, the 1835 article from Charles Van Geert, suggests otherwise, though Van Geert's brief description is ambiguous.¹² That some hybrids developed by Mortier may have come from only American parents and others from intercontinental parents does not require the purely American crosses to come first. His initial Ghent Hybrids could have been between the Pontic and an American species. Other crosses could have been between only Americans. Later crosses could have involved F_n hybrids.

Our recent knowledge of the ploidy of deciduous azaleas and its effect on hybridization bring into question the early assumptions made of what species went into the making of the Ghent Hybrids. Ghent Hybrids now have been subjected to some ploidy testing. Tom Eeckhaut and a team from the Department of Plant Genetics and Breeding of the Centre of Agricultural Research in Ghent studied the ploidy of 21 Hardy Ghent Hybrids. Of those, 16 were tetraploid, and 5 were triploid. John and Sally Perkins and the team under João Loureiro at the University of Coimbra in Portugal have tested about 80 Ghent Hybrids. Most were tetraploid, a few were triploid, and only one was a diploid.¹³ These are significant findings. If most of the original crosses had been made by pollen from tetraploid species such as *R. calendulaceum* or *R. luteum* onto diploid species such as *R. viscosum*, *R. flammeum*, or *R. periclymenoides*, the results would almost always be a sterile triploid and a dead end for further hybridization. This means that it is most likely that the polyploidy of the early hybrids originally occurred from tetraploid species such as R. luteum, R. calendulaceum, R. atlanticum, and perhaps even the pink form of *R. austrinum*. This strongly suggests what was thought to have been the swamp azalea in the mix may have been the coastal azalea, and the primary species used as both pollen and seed parent are likely to have been tetraploid. It is remotely possible, however, that Mortier created the rare fertile triploid and found the magic key.

Mortier's Results

Frans de Potter reported that Mortier created hybrids the likes of which had never been seen. Hubert Van Hulle noted that his attempts were marvelously successful: better-made flowers, later-bloomers, large palette of colors. Louis Van Houtte praised Ghent perfection and scoffed at the American trumpets which he considered only small tubular prototypes. He called Mortier the "creator of the most beautiful varieties of azaleas for the open-ground (d'Azalées de pleine terre)." Charles Van Geert said that the reward from the hybrids of Pontic and American plants surpassed expectations, and the result was the creation of a new and distinct group, the late-bloomers ("the tardives"). Mortier's new hybrids with their brilliant colors caused a sensation. Mortier sold 10 of his plants to a Gentbrugge gardener named Louis Hellebuyck for 10,000 francs. Ten thousand francs in 1833 would purchase about 2,900 grams of gold, and at recent value (Sep 2022) would be worth about \$170,000. There can be no doubt his hybrid creations were at that time special. A year later, Louis Verschaffelt purchased the last

of Mortier's hybrids. Louis Verschaffelt, Frans Van Cassel, Van Acker, Louis Hellebuyck, and Louis Van Houtte continued Mortier's hybridizing efforts, choosing only the best for further crossings. Some of Verschaffelt's first hybrids were illustrated in 1846 and more in 1847. The 20 varieties illustrated were given variety names but grouped under the titles Azalea Mortieriana var. Hybridæ and Azalea Mortierianæ var. Hortenses Hybridæ.¹⁴ In 1849, Louis Van Houtte bought 25 Mortieri varieties from Verschaffelt and 12 additional Mortieri hybrids from the widow of Louis Hellebuyck and her sons. The Frenchman Paul Robichon, in 1853, purchased the remainder of Louis Verschaffelt's nursery, which included many Ghent Hybrids. These breeders and others continued to build on Mortier's initial much sought after hybrid seedlings.¹⁵

So, who was this mysterious P. Mortier? In Part 2, we lift the veil to tell more about the man, his family, places he lived, and first successful deciduous azalea hybrids, the Ghent Azaleas.

End of Part 1. To be continued in the Summer 2023 edition of *The Azalean*.

Notes and References

1. Early writers had a habit and style of using initials instead of first names. The resulting ambiguity impedes those in search of accurate information. This short-sighted writing style continues to this day, even recommended in some current style manuals.

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3. Du Pre, Ellen. 1994. De exotische planten in de botanische tuinen van liefhebbers en beroeps te Gent en omstreken, in de periode 1800-1850 [The exotic plants in the botanical gardens of enthusiasts and professionals in Ghent and the surrounding area, in the period 1800-1850, thesis, University of Ghent; John of Gaunt (1340-1399), Duke of Lancaster, duc d'Aquitaine, son of English king Edward III, was born in Ghent. In traditional English, the town was spelled "Gaunt." In French, the town is spelled "Gand," in Dutch/Flemish "Gend" and "Gent," and in German "Gent." 4. Société Royale d'Agriculture et de Botanique de Gand. Bestor website page: https://www.bestor.be/wiki nl/index. php/Soci%C3%A9t%C3%A9 royale d%27agriculture et de botanique de Gand>. Accessed 11 Jan 2021; Rodigas, Em[ile].1880.

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5. De Raedt & de Groote, 24; Gazette van Gend [Ghent Gazette], 1806 Dec 11, p3 c1, available online from Ghent University Library: https://lib. ugent.be/en/catalog/ser01:000366992?i=3&q=Ga zette+van+Gend> as a Google book download by year, accessed 11 Aug 2022; Spae, D[ieudonné]. 1846. "Azalea Mortieriana var. Hybridae." Annales de la Société Royale d'Agriculture et de Botanique de Gand [Annals of the Royal Society of Agriculture and Botany of Ghent], 2: 325-6. Gand: Imp. De C. Annoot-Braeckman; Neill, Patrick. 1823. Journal of a Horticultural Tour Through Some Parts of Flanders, Holland and the North of France, 67-74. Edinburgh: Bell & Bradfute; Street, 55-60; Histoire de la Société, 29-30; Mussche, Jean Henry. 1817. Hortus Gandavensis, 22. Gand: Gosein-Verhaeghe.

6. Neill, loc. cit.; Histoire de la Société, 29-30,

44. J. B. de Wulf's name has been spelled "Wolf," "Wulf," and "Wulff."

7. Street, 50-57; Lee, Frederic P. 1958. The Azalea Book, 122. Princeton NJ: D. Van Nostrand Company; Trees and Shrubs Online. "Rhododendron: The Hybrids/Azalea Hybrids-Deciduous / Ghent Azaleas," < https://treesandshrubsonline.org/articles/rhododendron-the-hybrids-azalea-hybridsdeciduous/>, accessed 8/13/2022 (formerly Bean's *Trees and Shrubs Hardy in the British Isles*); Bowers, Clement Gray. 1936. Rhododendrons and Azaleas, their Origins, Cultivation and Development, 175-177. New York: The MacMillan Company; Van Geert, Charles. 1835. "Remarks on the Culture etc. of the Azalea," in *The Floricultural Cabinet and Florist's Magazine*, 1836, 4: 31-33. 8. Van Houtte, Louis. 1861. Flore des Serres et des Jardin de l'Europe [Flora of the Greenhouses and Gardens of Europe], 14: 105; Van Houtte. 1858. Flore, 13: 13; Spae, loc. cit.; [Potter, Frans de]. 1866. Gent de Stad van Flora [Ghent, The City of Flora], 24. Also in 1865. Oud en Nieuw: *Historische*, *Letterkundige* en Wetenschappelijke *Uitgaaf* [Old and New: Historical, Literary and Scientific Edition], with 1866 attachment, 387-8. Ghent: van C. Vyt, 34-35; Van Hulle, H[ubert] J. 1877. "The Rustic Azaleas of Ghent." Revue de *l'Horticulture Belge et Etrangère* [Journal of Belgian and Foreign Horticulture], 3: 3-4.

9. Potter, *loc. cit.*; An orangery or orangerie was a structure with glass roofs and walls on fashionable residences from the 17th to 19th centuries where citrus trees and other non-hardy trees and shrubs could be protected from cold. More than a greenhouse, this larger structure was a symbol of prestige and wealth.

10. Spae, *loc. cit.*; Charles Van Geert, *loc. cit.*; Van Houtte, 1858, *loc. cit.*; Van Houtte, 1861, *loc. cit.*; Van Houtte, 1873. *Flore des Serres et des Jardin de l'Europe*, 19: 152-156; Van Hulle, *loc. cit.*; Eley, Charles. 1923. *Gardening for the Twentieth Century*, 204. New York: E. P. Dutton & Co.; Lee, 122 ; Street, 55; Schmalscheidt, Walter & Huisman, Tijs, translator. 2004. "The Story of Hybrid-ization of Deciduous Azaleas in Western Europe." https://www.rhodoland.nl/articles.en.htm. accessed 11 Jan 2021; *Trees and Shrubs Online*, *loc. cit.*

11. Van Houtte. 1873, *loc. cit.*; Van Houtte. 1874, *loc. cit.*

12. Wilson, Ernest H. & Rehder, Alfred. 1921. *A Monograph of Azaleas*, 176-179. Publication of the Arnold Arboretum, No. 9. Cambridge, MA:

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13. John Perkins. 2021. personal communication; Eeckhaut, Tom G. R., Leen W. H. Leus, Albert C. de Raedt, & Erik J. Van Bockstaele. 2004. Occurrence of Polyploidy in Rhododendron luteum Sweet, Hardy Ghent, and Rustica Hybrids. The Azalean, 36(2): 32-38. The triploids were 'Mina Van Houtte', 'Daviesii', 'Quadricolor', 'Gloria Mundi', and 'Van Houtte Flore Pleno'. 14. Mortieriana is the name of a group of hybrids. Originally, it may have been the name of a single cultivar. It should not be italicized. These and similar old cultivar and group names followed the unfortunate early tradition of looking like Latinized botanical names. During this period, cultivar names were not always capitalized and never put in single quotes. Even with botanical names, binomial species were not put in italics, but sometimes used a different font, such as small caps, or different font size. The italics standard evolved later. 15. Potter, 35; Van Hulle, loc. cit.; Van Houtte. 1861, loc. cit.; Spae, loc. cit.; Morren, Charles. 1847. Annales. 1847, 3: 9; Van Houtte. 1873, loc. cit.; Charles Van Geert, loc. cit.; Schmalscheidt, *loc. cit.*; De Raedt & de Groote, 49-50; *Journal* D'Horticulture Pratique de la Belgique [Journal of Practical Horticulture in Belgium]. 1853. 224.

About the Author

Charles R. Andrews, III, lives in Cumming, Georgia, and is the 2023 ASA President. He has been studying North American azaleas in the field and the literature for over 40 years. Charlie writes and speaks on azalea topics and is currently writing a book on the history and characteristics of this complex group of plants.



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