



## Pelargonium: By Any Other Name Would Smell as Sweet?

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### What's in a Name?

There was no flower on earth that Charles Dickens loved quite as much as the scarlet “geranium.”<sup>1</sup> With its vibrant red blooms and showy foliage, this cheerful plant always adorned the dining table and dominated the garden in “a blaze of color” at his country home [Gad's Hill Place](#), in Kent.<sup>2</sup> Attendees at his public readings could always count on seeing the scarlet flower displayed in his jacket buttonhole, and his appreciation of the flower was such that his daughter, Mamie Dickens, recalls her sister saying to him, “I believe, papa, that when you become an angel your wings will be made of looking-glass and your crown of scarlet geraniums.”<sup>3</sup>



⋮ Charles Dickens with hi...⌂

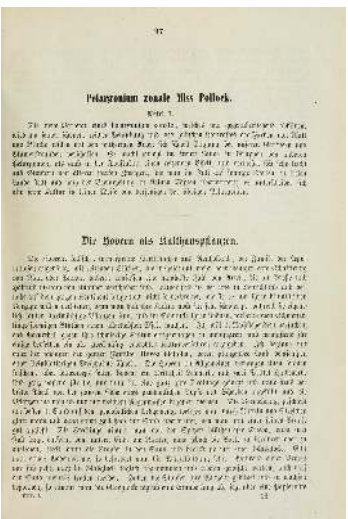


⋮ Window with portrait of Dickens encircled by a...⌂



⋮ Flower bed of red...⌂

However, you might be surprised to learn that the scarlet “geranium” with which Dickens was so enamored was not a member of the genus *Geranium*. In fact, it belonged to an altogether different genus named *Pelargonium* and was a bedding variety derived from *P. inquinans* and *P. zonale*, probably the cultivar “Mrs Pollock” or “General Tom Thumb.”<sup>4</sup> The misidentification of the pelargonium is common today because the plant has been confused with the geranium since its introduction into Europe in the early 1600s.<sup>5</sup> As the debate over how to classify pelargoniums roiled in botanical circles of the eighteenth and early nineteenth centuries, new horticultural technologies and breeding techniques led to an astounding increase in the number of hybrids commercially available—and their popularity soared. By the mid-1800s, the public had grown accustomed to using the common name geranium for the pelargonium, as for the most part we continue to do today.



⌋ Pelargonium zonal... ⌋ ⌋ Pelargonium zonale... ⌋ ⌋ Scarlet geranium ⌋

So how can we tell the history of the neglected pelargonium, a plant that is now a familiar cultural fixture for so many of us, but one that so few people know by its true identity? Perhaps it is time to narrate the lesser-known story of the pelargonium and to relate its history—from its unique morphology and nomenclature to its far-reaching impact in the spheres of industry, technology, agriculture, culture, and society. Part of the larger cultural history of the pelargonium, this interdisciplinary narrative focuses on its uses in England, France, and Algeria during the nineteenth century to reveal that the modern pelargonium was an invention of the Industrial Age. Bred for use as an ornamental plant or an aromatic crop, these newfangled pelargoniums possessed aesthetic and fragrant traits tailored to Victorian sensibilities, with enduring mass appeal.

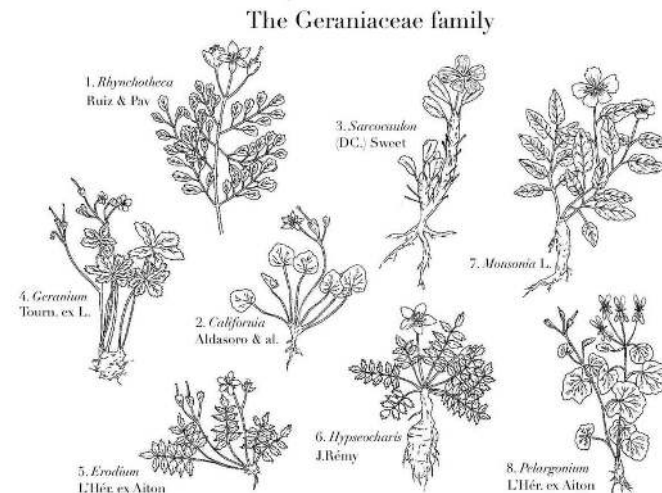
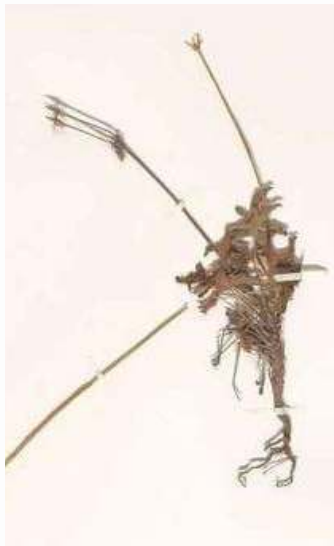


⌋ James Tissot,... ⌋ ⌋ Pelargoniums bloom in garden vases,... ⌋ ⌋ Floriculture ⌋



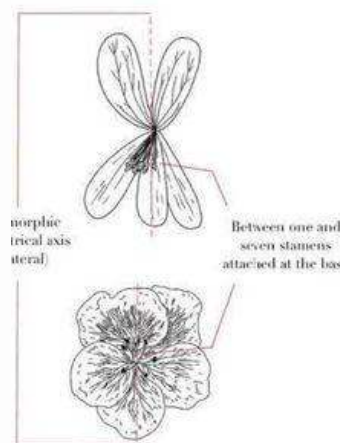
# Pelargonium Morphology: Seedpods and Flowers

The pelargonium and its relatives geranium and erodium belong to the family Geraniaceae. The scientific names of these genera indicate their morphological resemblance to long-billed birds and, to some degree, each other. Pelargonium, from the Greek *pelargos* (stork), alludes to the plant's long, beak-shaped seedpods and fruits. Similarly, geranium from *géranos* (crane) and erodium from *erodios* (heron) describe columnar fruit capsules that are found in some species. As this dried pelargonium specimen shows, the columnar capsules emerge from the centers of flowers, aiding in seed dispersal and reproduction.



⋮ Pelargonium... ⌂ ⋮ Veronica Matallana The Geraniaceae family Copyrig...⌂

Other morphological traits distinguish members of the genera pelargonium from geranium. This diagram highlights several key differences that can be observed by comparing the reproductive systems of the two plants: the flowers. The pelargonium flower parts are arranged bilaterally around one axis, making them quite distinct from the radially oriented ones of the geranium. Another difference is that, while the geranium has five nectaries (nectar-secreting glands) at the base of the petals, the pelargonium has only one embedded in the receptacle. Yet another divergence is the number of fertile stamens and their groupings. The pelargonium has between one and seven stamens, attached at the base; the geranium has either five or ten free stamens. Finally, pelargonium flowers are either red, light yellow, mauve, purple, pink, or white; geranium flowers are either dark blue, purple, pink, or white, but never scarlet (as Dickens would have known it).

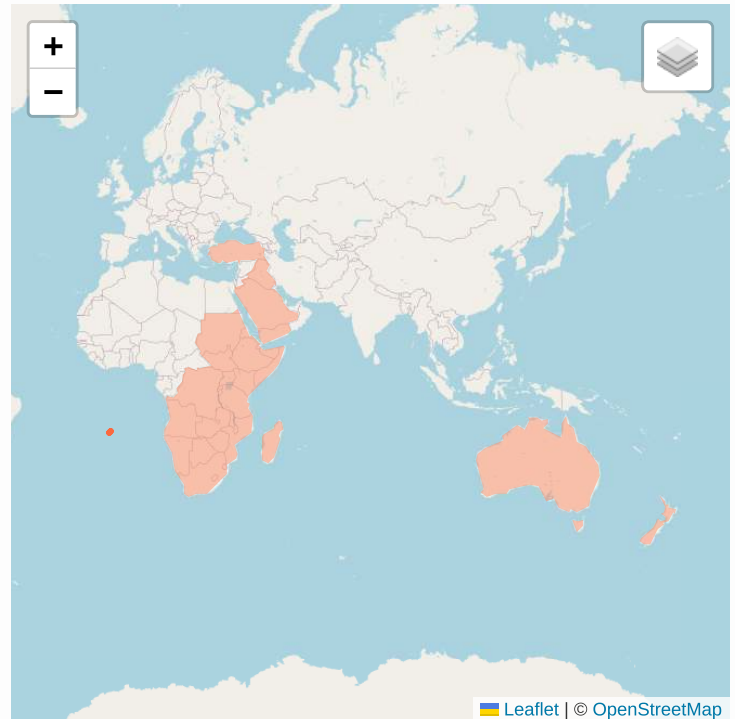


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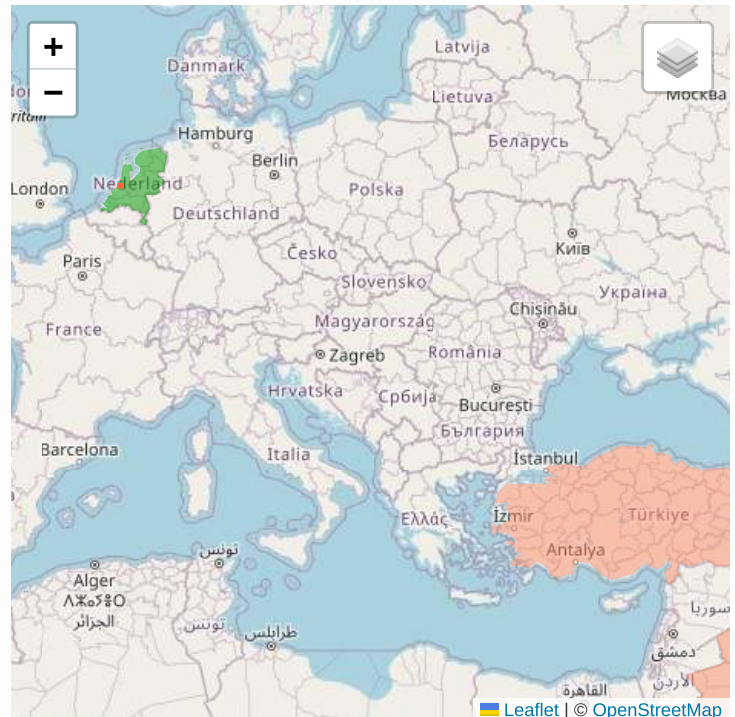
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# Introduction to Europe and Nomenclature Confusion

The *pelargonium*, which includes more than 280 accepted species, is native to Southern Africa, Saint Helena, Asia Minor, Madagascar, and Australia. The great majority of these species are endemic to the Cape regions of present-day South Africa—a biodiversity hotspot. Given their concentration there, it is not surprising that Dutch traders, who first introduced pelargoniums to Europe in the early seventeenth century, harvested them from the Cape.<sup>6</sup>



Of the many *Pelargonium* species native to Southern Africa, *Pelargonium triste* was probably the first to reach Europe, in the early 1600s.<sup>7</sup> In 1672, several more species were collected—mostly from Table Mountain, on the Cape peninsula—and shipped back to the Leiden Botanical Garden by Paul Hermann, a medical officer with the Dutch East India Company.<sup>8</sup> Hermann is credited with introducing *P. cucullatum* to the garden, and his 1689 book *Paradisi Batavi Prodrromus* lists pelargonium as “African geranium.”<sup>9</sup> Yet, it is important to note that some mystery still surrounds the identities of these plants because there was not yet a standardized method for naming them.



The nomenclature confusion surrounding pelargonium started when *Pelargonium triste* reached Europe. The plant was initially called *Geranium Indicum nocto odorato*—night-scented geranium of India.<sup>10</sup> Europeans misidentified the specimen as a geranium because they were already familiar with *geranium* species, which are native to the Mediterranean Basin. Additionally, Dutch traders brought the pelargonium to Holland on their return from colonial voyages to the East Indies, prompting some to assume, wrongly, that it was harvested from India. During this period, Jacques Philippe Cornut renamed the plant *Geranium triste*, which he depicted and described in his 1635 book *Canadensium Plantarum*.<sup>11</sup> *Triste* (sad) presumably alludes to the pelargonium's dull-colored foliage or flowers, and the descriptor stuck.



⋮ Pelargonium geranium triste COR Canad PI 000126 ⌂

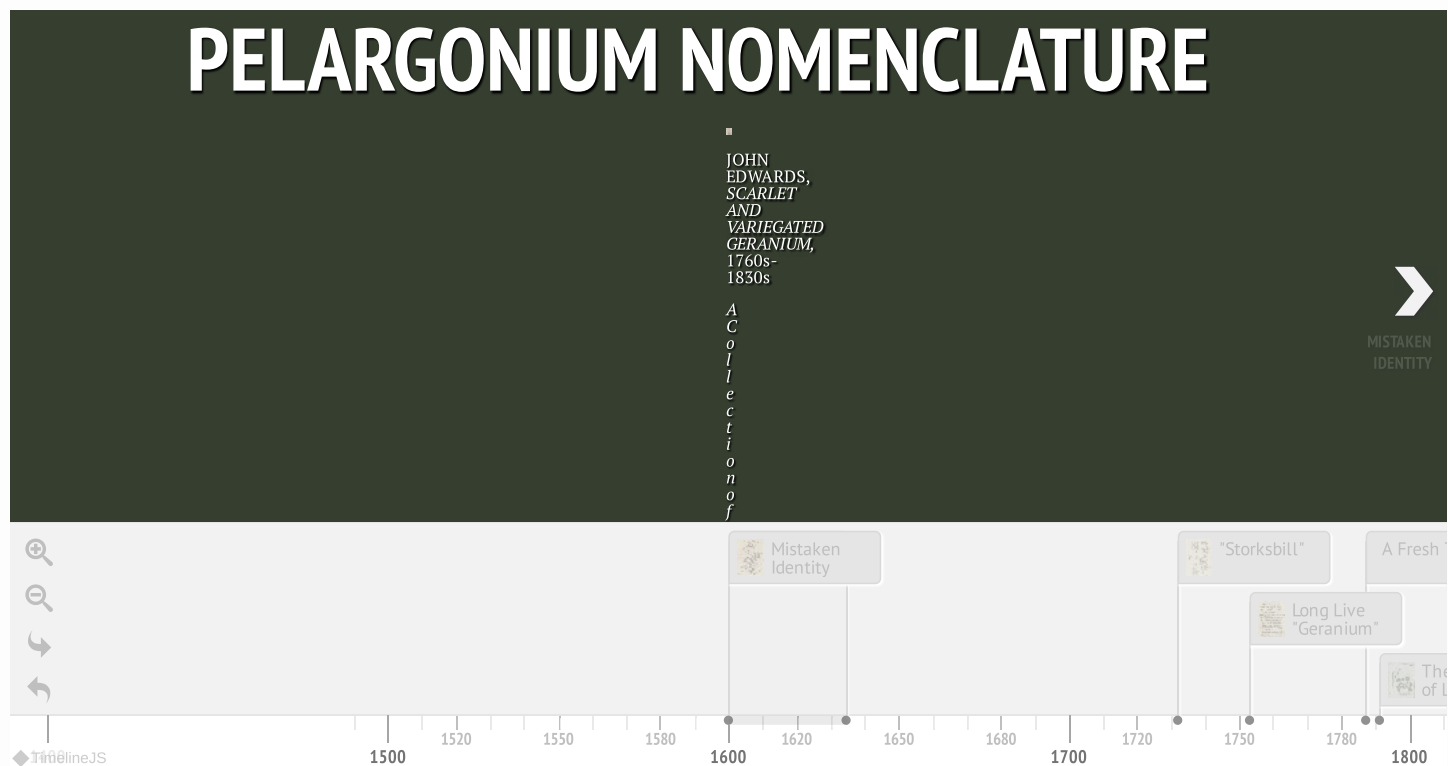


⋮ Pelargonium triste 4





In the wake of that initial nomenclature confusion, seventeenth-century botanists struggled to recognize the differences among the genera *Pelargonium*, *Geranium*, and *Erodium*. The interactive timeline gives an overview of the nomenclature history of the genus *Pelargonium*, providing insights into why there is still confusion surrounding the name and taxonomic designation of pelargoniums today.<sup>12</sup>



## Technology, Breeding, and the Modern Pelargonium

The genus *Pelargonium* is amazingly varied, including both annual and perennial plants that naturally occur in temperate and tropical climates. For that reason, the first specimens to reach the Netherlands were cultivated in heated greenhouses to protect them from the region's cold and frost.<sup>13</sup> By the early 1800s, new technologies—both for fabricating iron and plate glass and for constructing buildings with these materials—fueled a fad among the social elite of Europe and America for purchasing conservatories in order to grow exotic plants.<sup>14</sup> These innovations combined with new knowledge about hand-pollination techniques made pelargoniums, which are easily hybridized that way, an ideal choice for such cultivation by plant collectors and amateur breeders.<sup>15</sup>

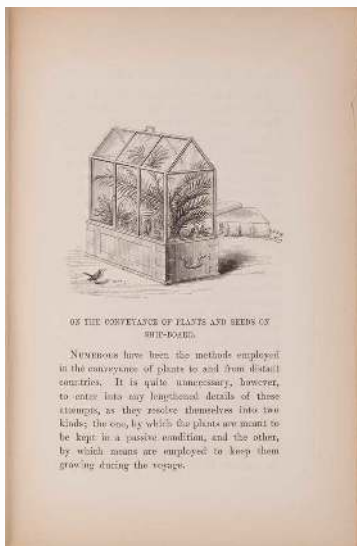


: Samuel William...



: Eduard Gaertner, The Family ...

Another technology, the [Wardian case](#), contributed to a tremendous expansion of ornamental plant trades in early and mid-nineteenth-century Europe. The case, a sealed glass container invented by Nathaniel Bagshaw Ward, allowed naturalists, horticulturalists, and others to transport live specimens intact during lengthy overseas voyages.<sup>16</sup> This advance in plant mobility made exotics more abundant, accessible, and affordable, increasing the popularity of gardening as a hobby for the upper and middle classes. The Wardian case had an impact in the domestic space as well, enabling home gardeners to cultivate foreign plants and mixed-species gardens indoors in such decorative glass furnishings.<sup>17</sup> To meet the unprecedented demand for ornamental plants at midcentury, savvy nursery owners developed the zonal pelargonium for bedding in gardens and, later, the regal pelargonium for growing in domestic conservatories and the home. The marvelous modern pelargonium—part natural wonder, part human invention—bloomed just as mass consumer culture embraced fresh flowers and greenery to improve nearly every aspect of daily life.

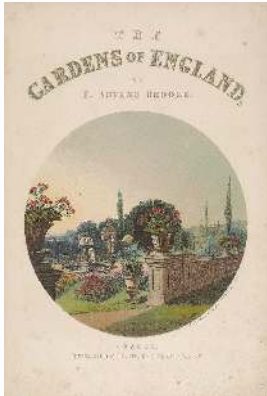


⋮ *On the Conveyance ...* ⌘ ⋮ Seymour Joseph Guy, *The Contest for the...* ⌘ ⋮ *Wardian Case*, from... ⌘



# Pelargonium-mania in the Victorian Era

It was against this backdrop that pelargoniums became a centerpiece of many municipal and private pleasure gardens in Victorian England. In the 1837 volume of the magazine *The Floricultural Cabinet*, a number of pelargoniums for bedding were well-known garden staples.<sup>18</sup> As the number of commercially available hybrids increased, so did their profile in the era's most fashionable green spaces, a trend celebrated by artist Edward Adveno Brooke's 1858 book *The Gardens of England*.<sup>19</sup> As he explains, the bright scarlet pelargonium bloomed nearly everywhere, from stone vases to flowerbeds and parterres. Indeed, Brooke represented these locations in paintings that were reproduced as chromolithographs for his book, including the ones depicting the upper and lower terrace gardens of Bowood House, the colonnade of Alton Gardens, as well as the parterre of Harewood House.



⋮ The gardens ... 📖



⋮ Upper and Lower Terrace Gardens,... 📖



⋮ The Colonnade, Alton Gardens,... 📖



⋮ The Parterre, Harewood Wood, ... 📖

Gardeners favored hardy zonal pelargoniums because they show off their blooms for extended periods, flowering even in slightly chilly climates.<sup>20</sup> More significantly, nursery owners adored the pelargonium because it was easy to grow and hybridize, producing cultivars in a seemingly infinite variety year-round. By the late nineteenth century, vendors were falling over one another to market the newest, most magnificent plants that, in addition to those for bedding, included varieties of regals with [pretty-petal markings](#) and the ivy- and scented-leaf types, known for their pleasing foliage. Additional factors contributing to the pelargonium-mania were the arrival of mass-produced pots and planters for displaying ornamental flowers and dazzling greenery. Desire to obtain novel cultivars became so frenzied that some compared it to the now infamous [tulip-buying spree](#), known as tulipomania, that occurred in the Netherlands in the 1630s.<sup>21</sup>



⋮ Giraud, Jane Elizabeth,...



⋮ E. Buckman, engraved by W. B. Gardener, The Flower-...



THE ALHAMBRA, FLOOR PLAN.

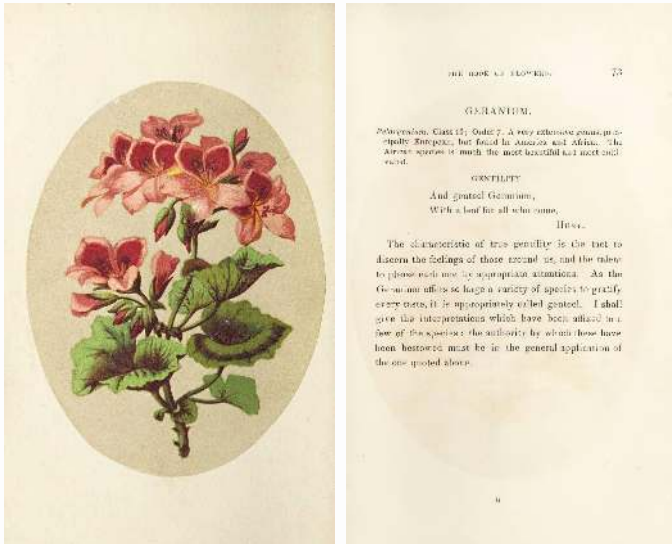
Architectural floor plan of the interior of the Alhambra, showing a central hall with a complex geometric pattern of arches and niches. The plan is labeled with numbers 1 through 10 and letters A through Z. The central area is labeled 'ALHAMBRA' and 'ALHAMBRA'. The plan is oriented with 'N' at the top and 'S' at the bottom. The plan is labeled 'THE ALHAMBRA, FLOOR PLAN' at the top.

⋮ Shirley Hubberd's... ⋮ Shirley Hibberd's... ⋮



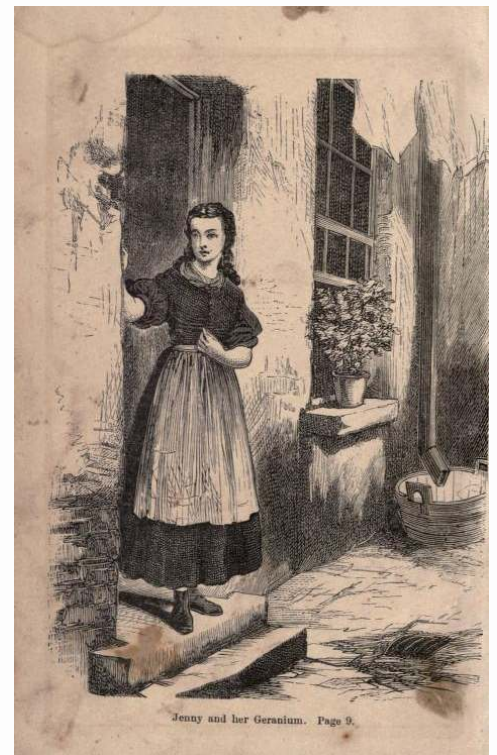
# The “Genteel” Geranium and Working-class Culture

The ubiquity of the *Pelargonium* in the Victorian era soon began to carry a cultural significance all its own—and it was not always a positive one. In the 1864 *The Book of Flowers*, Sarah Josepha Buell Hale follows the poet Leigh Hunt in describing the geranium (of course, really a pelargonium) as a genteel plant.<sup>24</sup> She writes, “As the Geranium offers so large a variety of species to gratify every taste, it is appropriately called genteel.”<sup>25</sup> Although we may construe her comment as merely an attestation to the pelargonium’s universal charms, her use of “genteel” takes on additional meaning when we consider the significance of the pelargonium in the context of working-class culture.



⋮ Illustration of a... ⋮ Geranium, Sarah... ⋮

For many Victorian families who could not afford to have gardens, growing pelargoniums in pots and displaying them on windowsills or balconies became an expression not only of their aesthetic tastes, but also of their social aspirations. Perhaps because of such class-based bias, professional horticulturalists would often look down on the pelargonium with a certain derision. Gertrude Jekyll writes in 1919 that, “It is a common thing for friends to express surprise at seeing scarlet Geraniums ... in my garden, forgetting that it was not the fault of the plants that they were misused or employed in dull or even stupid ways.”<sup>26</sup> Her comments imply that it was not the plants themselves that were offensive to garden specialists but, rather, the style and context in which they featured.



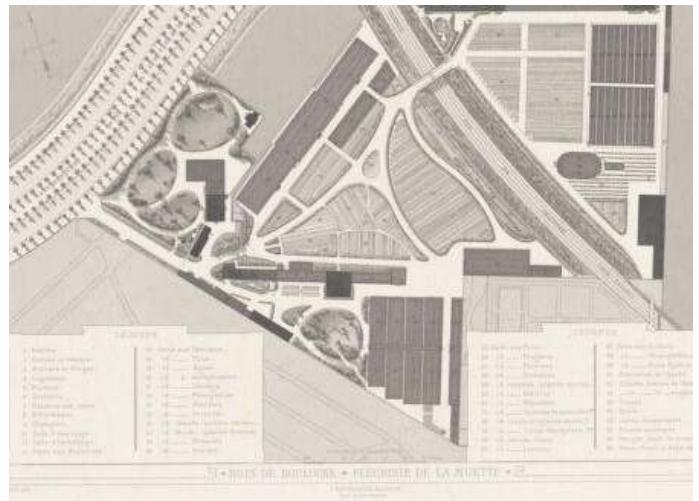
⋮ Jenny's geranium, or, The priz... ⋮

# Pelargoniums, Imperial Splendor, and Colonial Profit

The pelargonium was also a tremendously fashionable flower in mid-nineteenth-century France, particularly in Paris. As part of a massive urban renewal project, Napoleon III, Emperor of the French, and Georges-Eugène Haussmann, prefect of Seine, oversaw the creation or revitalization of Parisian public parks, gardens, squares, and promenades.<sup>27</sup> Indeed, Adolphe Alphand's book *Les Promenades de Paris* inventories the myriad plants, shrubs, and trees used to beautify these green spaces, between 1853 and 1870.<sup>28</sup> Needless to say, garden designers and horticulturalists chose many showy pelargoniums, reserving at least eight glasshouses, at a newly constructed municipal nursery, for cultivating them. Although Alphand primarily celebrated the aesthetic effect produced by bedding brightly hued pelargoniums en masse, the flowers served other functions too.<sup>29</sup> The French- and European-bred flowers, which retained some of their exotic associations with Africa, exemplified the global reach of the Second French Empire because the plant was being used as an economic crop in French Algeria.



⋮ Alphand, A. (Adolphe). *Les Promenades de Paris...*



⌂ ⋮ Alphand, A. (Adolphe). *Les Promenades de Paris...*⌂



Around 1850, the French perfume industries of Grasse, a leading center of perfume production, introduced the pelargonium to present-day Algeria in order to cultivate and produce aromatic oil from it.<sup>30</sup> Under French rule since 1830, Algeria was considered an ideal place for growing this economic crop due to its warm arid and semi-arid climate and the low cost of colonial labor needed to cultivate, harvest, and prepare the plants for distillation. Perfumers selected pelargoniums because certain kinds, namely *Pelargonium graveolens*, have a sweet aroma similar to roses, making them a cost-effective alternative to the real thing. Pelargonium oils are extracted by [distillation](#) and the substances that evaporate and condense again are taken from the leaves, stems, roots, flowers, fruits, and seeds of the plant. It should be noted that not all pelargoniums smell, and some scented-leave varieties give off unpleasant, pungent odors akin to fish or he-goat.<sup>31</sup>



⋮ Gabriel Mazuyer, Georges Lecomte, Lucien Bouch... ⋮

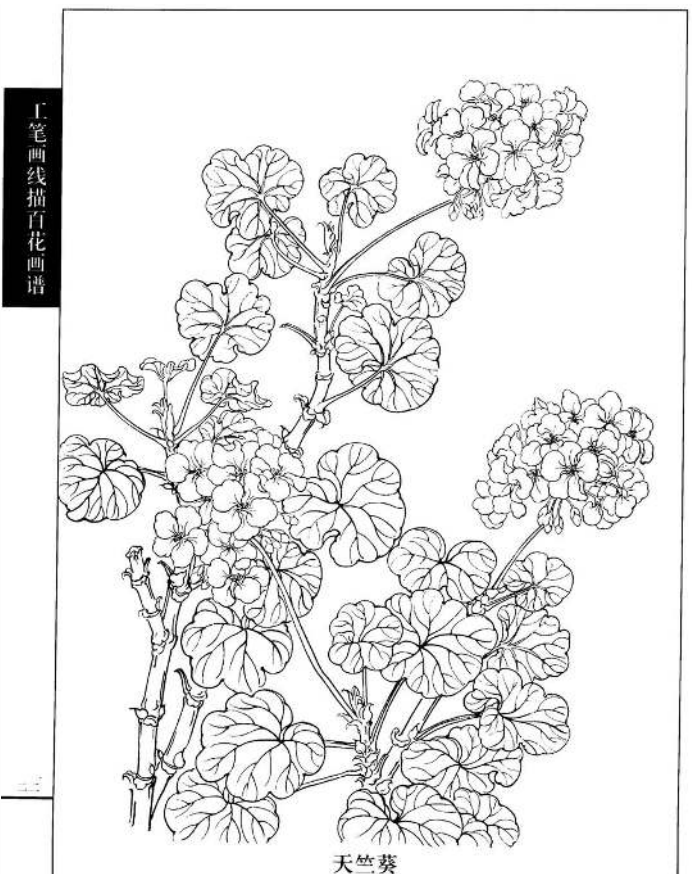
The Grasse-based [Chiris parfumerie](#), founded by Antoine Chiris in 1768, provides a case study on the production of pelargonium oils.<sup>32</sup> The artisanal factory specialized in manufacturing soaps, ointments, scented waters, and perfumes from aromatic plants. In the nineteenth century, Chiris expanded into a global, industrial company with many farms in colonized territories. For example, it used colonial labor to grow “Rose geranium” or *Pelargonium graveolens* in Boufarik, Algeria. In 1865, the company built a cutting-edge 3,000 square meter factory in Boufarik’s Saint-Marguerite domain, growing pelargoniums along with orange and eucalyptus trees.<sup>33</sup> The group of photographs, shows the Chiris complex and its workers engaging in cultivating, harvesting, and preparing pelargoniums for making rose-scented oils and other products.



⋮ Pelargonium fields and floricultural industry, Algeria...⋮ ⋮ Geranium graveolens ⋮



Today, pelargonium oil continues to be industrially produced in factories across the globe, most notably in Egypt and China.<sup>34</sup> Significantly, the confusion surrounding pelargonium nomenclature in European contexts also exists in China. More than 50 percent of Chinese packaging uses “Geranium Essential Oil” as its English translation, even though the product is labeled as *Tianzhu Kui You* (Pelargonium Oil) in Chinese. It is said that the name *Tianzhu Kui* was introduced by the Chinese horticulturalist Junyu Zhang in 1933 based on his studies in Japan.<sup>35</sup> The words *Tianzhu Kui* are from ゼラニウム, which is pronounced as *Geranium* in English.



∴ Gongbi line drawing is a genre that places great... [ ]

## Hiding in Plain Sight

Although the *Pelargonium* by any other name would smell as sweet, excepting those that are scentless or pungent, our recognition of its unique identity is long overdue. Indeed, the *Pelargonium*'s almost-forgotten global history is extremely rich, blossoming as it does at the intersections of colonial trade, botany, agriculture, gardening, art, culture, and industry. Telling the story of the *Pelargonium* as an entity separate from the *Geranium*, illuminates just some of the many ways in which it has been interwoven with human histories—hiding in plain sight, as it were, by virtue of its long-persisting misnomer.



: Johannes Hendrikus...



: Eugène Blondelet, Plant...



: Image of geranium “sto...



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29. "Parmi les plantes qui produisent le plus d'effet, en massif, et qui supportent le mieux la pleine terre en été, on doit citer les variétés de Pélargoniums [...]." (Among the plants that produce the most effect, in clumps, and that best support the open ground in summer, we must mention the varieties of Pelargoniums. [...]) Adolphe Alphand, *Les Promenades de Paris*, 64; Clare A. P. Willsdon, "'Promenades et plantations': Impressionism, Conservation and Haussmann's Reinvention of Paris," *Soil and Stone: Impressionism, Urbanism, Environment*, eds. Frances Fowle and Richard Thomson (Burlington, Vermont: Ashgate, 2003), 107–24. ↵
30. "Notes & Actualités. Le Gêranium rosat dans l'Afrique du Nord," *Revue de botanique appliquée et d'agriculture coloniale* 7, no. 68 (April 1927): 273, accessed January 21, 2021, [https://www.persee.fr/doc/jatba\\_0370-3681\\_1927\\_num\\_7\\_68\\_4513](https://www.persee.fr/doc/jatba_0370-3681_1927_num_7_68_4513) ↵
31. Herb Society of America, *Pelargoniums: An Herb Society of America Guide*. ↵
32. Mathilde Cocoual, "La famille Chiris: Des industriels en politique, une politique d'industriels?," *Cahiers de la Mediterranee* no. 92 (2016): 177–91, accessed January 21, 2021, <https://doi.org/10.4000/cdlm.8359> ↵
33. Mathilde Cocoual, "La famille Chiris," para. 8; 173J 0001. *Domaine Sainte-Marguerite de l'entreprise Chiris à Boufarik (Algérie)* (FR-FRAD006 - FRAD006\_ABEL) ↵
34. According to IFEAT's (International Federation of Essential Oils and Aroma Trades) 2015 report: "In China, 5,000 to 7,000 families are involved in the production of geranium oil and around 25,000-30,000 people are involved in the whole supply chain....," and for Egypt, the numbers are "up to 8,000 families" and "about 30,000-35,000 people...." "An Overview of Some Important Essential Oils and Other Naturals: Geranium, *Pelargonium x spp.*," *IFEAT WORLD* (July 2015): 4-5, accessed January 22, 2021, <https://ifeat.org> ↵
35. For the Chinese scientific nomenclature of *Geranium* as Laoguan Cao, see *Flora of China* (*Zhongguo Zhiwu Zhi*) 43, no. 1 (1988): 32, accessed February 24, 2021, [BHL China](#); for the Chinese scientific nomenclature of *Tianzhu Kui* as *Pelargonium*, see *Flora of China* (*Zhongguo Zhiwu Zhi*) 43, no. 1 (1988): 85, accessed February 24, 2021, [BHL China](#). ↵