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A History of Zinnias: Flower for the Ages

Eric Grissell

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A History of DIMMUUS

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Cover image: Garden example of archetypal single Elegant Zinnia (*Zinnia elegans*), with strongly developed central cone of yellow disk flowers and a single outer row of ray petals. Each ray petal has a seed at its base. Compare with Photospread Fig. 17, an illustration of the original Elegant Zinnia described in 1792.



Flower for the Ages

Eric Grissell

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Preface

n the idyllic town of Nicasio, California, not far from where I grew up, a prim and proper elementary school principal was fired for growing marijuana in her garden. She admitted having smoked it almost daily for eighteen years as an aid for relaxing and to stay up late correcting papers. The odd thing about the principal's plight was that she was growing marijuana as a border around her zinnia bed! This, of course, is opposite to the garden norm in which zinnias should have encircled the marijuana bed as camouflage. Even so, this would have been pointless because zinnias aren't tall enough to mask cannabis—or so I'm told. Instead of being fired for growing pot in her garden, it seems that the principal should have been fired as a poor example of rational garden design. In her defense she explained, "I do not consider marijuana a habit-forming drug but for me, nicotine is."

For me, zinnias are the drug of choice. Their flowers, coming in every size, shape, and color except blue, are a mainstay of the summer and fall garden, blazing away without a care in the world. After growing all sorts of them for years, I became fascinated by their history—perhaps "antihistory"

is a better word—when attempting to discover some sort of truth about their historical development, a history, it turns out, verging on a puzzling mystery at best or a stew of illusive facts peppered with semifiction at worst.

Take, for example, the 1885 novel *Marius the Epicurean* by Walter Pater, who sets a colorful stage in late second-century Italy. His central character, Marius, visits the Rome flower market and purchases "zinias [sic] (like painted flowers, thought Marius) then in blossom, to decorate the folds of their togas." Over a century later Clayton Koelb, emeritus professor of literature at North Carolina University, correctly points out that zinnias were totally unknown in Roman times and that conspicuous inconsistencies are typical of modern concepts unwittingly appearing in works of historical fiction.³

As we shall eventually discover, when it comes to the history of zinnias, the reverse is true; that is, what are purported as historical facts today are often littered with fiction from the past. As a simple example, treated further in Chapter 2 of this book, Johann Gottfried Zinn, for whom the zinnia was named, has often been claimed to have collected zinnia seeds in Mexico and been attacked by bandits while doing so. Such stories, while exciting, are easily verified: Zinn never left Europe and had been dead for a hundred years at the time he was purportedly visiting Mexico. It was just such tantalizing bits of nonsense that enticed me to investigate the history of zinnias, at first simply to satisfy my own curiosity.

For many years I have been a fan of zinnias, but my Maryland garden was not conducive to growing the large well-known flamboyant types common in today's gardens (see Photospread Fig. 1). Instead, I was drawn to the relatively diminutive, scarcely improved narrow-leaf forms, reaching less than a foot in height with flowers no bigger than a quarter. These sorts happily reseeded on a yearly basis, needing no attention at all except to remove a few seedlings from spots where they were not appreciated. Without help from me, these plants produced hundreds of single flowers in simple colors of white, yellow, or orange. Unlike their more statuesque cousins, however, these mounds of color would grow without constant sunlight in small out-of-the-way places, wherever they decided to sprout.

Of course, I envied my friends who had sun and could grow the larger sorts, but I never felt obligated to tempt fate in that shady garden of mine. Then when I retired from my day job and moved to Arizona, I discovered perpetual

sun and little else. In the course of beginning a new garden, I was fortunate to discover two native perennial zinnias as well as an annual one with spiderlike red flowers, all previously unknown to me. Being practical, I grew these three zinnias in my garden, or rather, they grew themselves as naturalized residents.

But then, as do all gardeners, I succumbed to lust. I began seeking out the big ones—the zinnias that fill seed catalogs with glamorous images of color and height and variety of form. In my tottering old age, I turned to the glamorous garden zinnia, given one common name "Youth and Old Age," because young buds appear in abundance even as mature flowers retain their colorful composure, declining to pass on for weeks after their own youth. These are the hybrids, which made a round-trip journey first as humble wild forms originating in Mexico and were exported to Spain and then to England, France, Germany, and India, eventually returning to the Americas—all the time having been on the move and developing ever more colors and forms than occurred in their wild state. The odd thing about these impressive hybrids, now spread all about the planet, is that relatively little detail is known about them.

To put zinnias somewhat in perspective, there are about two dozen recognized named species, but we are only interested in a few that have become garden standards. All species of the genus *Zinnia* have a natural center of diversity in Mexico, spreading a bit farther to the north in the western United States and to the south as far as northern and western South America. They naturally originated in these regions of the New World regardless of where they now occur. About half the known zinnia species are hardy perennials appearing as small shrubs in some cases. These forms remain poorly known among gardeners, even keen ones. It is the annual sorts that are generally referred to as garden zinnias and form the subject of this book.

As flowers, annual garden zinnias have been popular since the early 1800s in North America and earlier in Europe, but the historical origin of the flower purports to date back much earlier—but certainly not to Roman times, as Walter Pater suggested in his novel—to the time of the Aztecs. According to legend, species of zinnia have been known and grown from the time of the Moctezumas, both father (I) and son (II)—that is, from the early 1500s to the present. It is generally assumed—possibly correctly—that

the typical zinnia grown in those times is what we would today call a garden zinnia, but it would have originated in a much different form. This zinnia is given the Latin scientific name *Zinnia elegans* (sometimes incorrectly called *Zinnia violacea*),⁴ which in everyday English means "elegant zinnia" and is referred to in the present work as the Elegant Zinnia. In its natural form it is a branching annual, about 3 feet (0.9 m) in height, with large purplish-pink flowers, each with a single row of petals and a large cone-shaped center (see Photospread Fig. 2). In the overall world of zinnias, this is the primary species from which our major garden varieties have developed. At present it is not easy to find, if at all, its native form due in part to the escape of cultivated varieties back into the wild as well as a bit of wanton interbreeding.

The earliest known examples of the Elegant Zinnia are termed "single-flowered," but this is a misnomer because zinnias are members of the composite or Asteraceae family of plants—imagine a sunflower—that represents a cluster of hundreds of individual tiny flowers growing upon a single platform called the receptacle. Therefore, and speaking technically, a zinnia or composite is not a flower but instead is a cluster of flowers, as its name suggests. In presenting a single sunflower to a favorite person, for example, it is most correct to exclaim "I have brought you a bunch of sunflowers," but this most likely won't catch on.

The small flowers that compose the "flower" of the Elegant Zinnia and all its relatives represent two basic types: ray flowers and disk flowers. Ray flowers each bear a single colorful petal and often a seed at its base; in single flowers these petals are lined around the rim of the receptacle, producing the "sunrays" as in a sunflower. Disk flowers have no petals and form the central cone of a zinnia. Whereas ray flowers are either sterile or female, disk flowers are both male and female, frequently appearing yellow or orange due to pollen of the male parts (anther/stamens), giving the center of a single composite flower its additional smidgen of color. The construction of a single-petaled zinnia gives rise to one of its lesser-used names, "Mexican Hat." Up to the 1850s all Elegant Zinnias were properly called single-flowered, but suddenly, as if by magic, there appeared double-flowered zinnias from a part of the world then thought of as magic. We will return to this subject in Chapter 7.

Although the Elegant Zinnia is the founding member of our modern-day garden zinnias, two additional species play a role in its further

development: the Narrow-Leaf Zinnia (*Z. angustifolia*) (see Photospread Fig. 3) and Haage's Zinnia (*Z. haageana*), often referred to as the Mexican Zinnia. Both species are annual, each having some degree of garden success, and are generally about a foot (30 cm) or so in height. The former has small single flowers in white, yellow, and orange, whereas the latter has small single or double flowers in bicolor forms of yellows, oranges, and reds. Both have been interbred with the Elegant Zinnia to produce spectacular garden varieties; Haage's Zinnia most likely introduced a bicolor factor to the Elegant Zinnias, and the Narrow-Leaf Zinnia added disease resistance and increased flower production.



Haage's Zinnia (*Zinnia haageana*) illustrated by its author Eduard Regel in 1863 (*Gartenflora*, plate 390); modern garden forms are shown in Photospread Fig. 28.

A fourth species, called the Peruvian Zinnia (Z. peruviana), has not played a part in improving the modern garden zinnia, yet it is the species that initially found its way into Europe and was first cultivated, at least in the known literature, both in Europe and the United States (see Photospread Fig. 4). This species, tall and lanky with single to semidouble flowers of red or yellow, exists today largely as an unimproved heirloom variety. Although essentially in its original form, it can be found currently along with a narrow-petaled form in the odd seed catalog or two. The latter form has been called Zinnia tenuiflora (or incorrectly Zinnia tenuifolia). Over the centuries the Peruvian Zinnia has gone

by a dozen different scientific Latin names, but it represents the botanical standard-bearer for the genus *Zinnia*, as we shall see in Chapter 2.

It was my interest in the development of today's hybrids that led me on a search of their historic roots, about which, I soon discovered, relatively little was written, and much of that is highly repetitive, verging at best on the dubious or at worst on the ignominious. Put more directly, some information has been repeated so often as to become legend rather than fact, what one writer on the history of dahlias refers to as "factions"—that is, stories based on bits of truth. Even with intensive efforts, much of the early historical status of zinnias remains unclear, especially when compared to such flowers as marigolds and dahlias, both of which have the same New World origin as zinnias and are discussed in Chapter 4. Opting to take a five hundred—year journey, following a faint trail of words on paper, has been difficult at best and harrowingly painful at worst, but in the end the search may prove of some interest to readers even if they currently know nothing about zinnias.

1

From Gilbert and Sullivan to Corvettes

arden zinnias, though among the most commonly grown annuals, are one of those flowers whose influences are greater than might easily be recognized. Originating as a lowly Mexican wildflower, they have held sway over subjects as far ranging as music, social customs, community design, larceny, art, battles at sea, and even outer space.

For example, the Savoy Theatre in London, home of W. S. Gilbert and Arthur Sullivan's Savoy operas, first opened in 1881. When remodeled almost fifty years later, its interior was completely restructured by the architect Frank A. Tugwell (1862–1940) with decorations by Basil Ionides (1884–1950). Ionides was an art deco designer and author of two books on color and design who, according to *The Observer*, renovated the Savoy Theatre based on five color hues of the "zinnia beds in Hyde park. It was not unknown—ah, those were the days!—for female members of the audience to find out in advance the colour of their seat, and match their dress accordingly."²

2 A History of Zinnias

Predating Ionides, in the early 1900s communities on the American side of the Atlantic recognized the importance of zinnias as they became more popular among designers. In 1913 zinnias were touted as elements of "Futurist designs" harmonizing "with designs formed of cubes and triangles" because of their rigidity and colors. The bright, clear colors of "this flower suggest those in the giddiest futurist silk," thus being used for fresh corsages and, in their artificial forms, as trimmings for hats and frocks.³ Zinnias were also being mentioned in the household decorations of society's best. At one marriage reception "orange colored zinnias decorated the table" in a Salt Lake temple,⁴ and in newspapers nationwide, mention is commonly found among visitors to those in high society. Luncheon visitors in Tulsa, Oklahoma, for example, were treated to a "lovely picture with quantities of brightly tinted zinnias and dahlias used as a floral centerpiece."⁵

During the same time as newly developing forms of garden zinnias were becoming popular and widespread, entire communities were adopting them for beautification projects—some quite grandiose. As early as 1912, the City Beautiful Association of Nashville, Tennessee, undertook a citywide program in which zinnia seeds were purchased at a local wholesale seed firm, and schoolchildren were each given a packet of seeds with the understanding that they would plant them and "properly care for the plants." Members of the association believed that if they could "succeed in enlisting the interest of such a large body of children . . . a very decided step will have been taken to advance the purpose of the movement, which is to give the city a more beautiful aspect and so help to make the home more attractive." Similarly, in 1922 the town of Red Cloud, Nebraska, declared that zinnias would be the community flower, claiming that in "many towns and cities a flower has been so chosen and planted by all." The zinnia was chosen because it was inexpensive and "withstands our often hot and dry summers better than any other flower blooming cheerfully through such a drouth as we had last year."7

Establishing citywide programs and seeing them to conclusion, however, are not necessarily the same thing. In 1980 a story circulating in the national news mentioned the town of Perry, Iowa, and the problems it was having with stolen plants. As earlier with Nashville and Red Cloud, the town chose the zinnia as an official flower, selecting the strain 'Pulcino' for

its municipal flower displays. 'Pulcino' is a small plant, rarely much over a foot tall, with large colorful flowers. The town was to have a zinnia festival, home garden contests, flower arrangement displays, and even a contest to crown the toddler Zinnia Queen.8 A problem arose with thieves, during the dead of night and even in daylight, digging up and stealing entire plants from the municipal garden, the Chamber of Commerce, local parks, banks, and the radio station. In spite of this thievery, the town renewed its plantings three times, and by September enough zinnias remained to hold the planned festival. Another was planned for the next year as well, only this time Perry police officers were expected to keep a closer watch on the town's zinnias. Because of the expense involved the planting was never repeated, and 'Pulcino' was abandoned as an official flower, never to be replaced. 10

Police were also involved in a story involving commercial seed plants grown by the W. Atlee Burpee & Co. In 1951 Burpee was about to introduce a new zinnia, called the 'Giant Burpee Hybrid', when one of three seed fields was accidentally sprayed with weed killer, leaving only two fields of a valuable new crop left to harvest. Coincidentally, Burpee had just had a problem with a valuable crop of dwarf nasturtium seeds being stolen from the company's Ventura, California, fields. This happened during the night after crews had left the field, and to prevent it from happening to the zinnia seed crop, Burpee arranged for the county sheriff and two deputies to guard the remaining two zinnia fields. 11

Although larceny is about the last thing one might imagine when dealing with zinnias, either plants or seeds, it fails in comparison to what some believed to be grand theft connected with the giveaway of free seeds administered by the US Department of Agriculture (USDA). In a program called the Congressional Free Seed Distribution (CFSD) program, zinnia seeds were among dozens of different flower and vegetable seeds being given away to the public. This program first saw the light of day in 1839, being run by the commissioner of patents, 12 but was turned over to the USDA, established by Abraham Lincoln in 1862.¹³ It did not become a politically mandated program until 1896. Prior to this it had been general practice for federal politicians to distribute seeds to their constituents. The practice traces its roots as far back as 1743, with the British government spending over half a million dollars to promote colonial agriculture. A large

4 A History of Zinnias

portion of the CFSD seeds went to local granges and alliance clubs, which in turn distributed them to farmers and households. ¹⁴ Some seeds also went to banks and factories to be distributed to schoolchildren and workers. ¹⁵ The program eventually died a natural death in 1923 as a result of alleged graft, politics, and questions of inconsistent naming and reliability.

In 1930 Major Harry L. Bateson (1889–1963) of Long Beach, California, began gardening in earnest and championed gardens as a radio commentator. One of his radio presentations was called *Garden School of the Air.* ¹⁶ As part of his campaign for home gardeners in America, he began what he called "Thrift Gardens," ¹⁷ though this appears to simply be an unnecessary name for what was then nationally called "Victory Gardens." In 1936 Bateson was celebrated as a plant breeder by *Popular Science* magazine for taking "thirty years of experimentations and cross-breeding" to develop a "missing link" between the strawberry and the rose, hoping eventually to grow strawberries on trees. ¹⁸

Apparently not above stretching the limits of credulity, Bateson also claimed to have worked for thirty years on yet another project, one associated with zinnias. During three decades he managed to breed a new bright gold zinnia, which, judging by images in newspapers of the time, appeared much like any other zinnia then being sold. Called the Gold Star Mother Zinnia, this zinnia became the national flower of the American Gold Star Mothers, an organization formed in 1928 and dedicated to mothers who had lost sons or daughters in the service of their country. In 1937 the Long Beach Chapter of the American Gold Star Mothers presented seeds of this zinnia to President Franklin D. Roosevelt, who set aside a half acre of land in Washington, D.C., to plant the seeds; he declared them "one of the nicest gifts I ever received."

Not only were zinnias becoming integrated into popular culture, but in one instance their culture became a cottage industry when several communities in two states came together as part of the Deerington Zinnia Gardens. Plural in name only, the official garden was established in Bargersville, Indiana. Its initial date of operation remains uncertain. Its founder, Ira E. Deer, was born on a farm near Providence, Indiana, in 1871. It is possible that this farm was the same ninety-seven-acre farm and home he occupied in Bargersville until his death in 1955. Little is known about

Ira Deer, but for a while he was a farmer and a member of the Indiana Corn Growers' Association, best known for growing oats²² and boasting of having grown a single tomato plant producing 205 tomatoes weighing a total of ninety pounds.

Not being satisfied with grains and tomatoes, Deer then became interested in flowers, especially zinnias, and with the help of his wife began growing them on a small scale. From this scant information it is probable that the Deerington Zinnia Gardens began sometime in the 1920s or 1930s. According to Rosemary Deer (surprisingly, no relation), who purchased Ira Deer's Bargersville farm in 1958 or 1959, Ira did not grow his zinnias on the property.²³ They were grown on an adjacent farm. As it turns out, the Deerington Zinnia Gardens were not public in the normal sense but instead was a business operation dedicated to growing zinnias for cut flowers and seeds. Rosemary Deer recalls that she and another girl used to harvest zinnia seeds in the fall.

I discovered one mystery surrounding the Deerington Zinnia Gardens when I came upon old seed packets from the "famous Deerington Zinnia Gardens" (see Photospread Fig. 5). There was an anomaly because the packets were imprinted with Maroa, Illinois, as the source of distribution. This seemed at odds with the fact that the owner of the business lived in Bargersville, Indiana. I consulted with local residents of Maroa and learned that Ira Deer, in addition to growing zinnias in Indiana, also subcontracted their cultivation to at least one farm in Maroa. According to Sharon Foster Woolum, a Marona resident, the farm was located between Argenta and Maroa, and Maroa women "sorted the seeds." 24 This took place toward the end of the 1940s and possibly the beginning of the 1950s. Based on this evidence and information from several government reports, I learned that both Bargersville and Maroa were places of business for the Deerington Zinnia Gardens, which would confirm that it was not truly a public garden, as might be expected from its name, but instead was a commercial enterprise.

Ira Deer's obituary mentions that zinnia seeds were originally only distributed within the state of Indiana, but there are published records of commercial seed being sent to states on the East Coast from 1942 to 1961. At the time, seed could be purchased at prominent department stores such

as Kresge's, Newbury's, and Woolworth's, but the business ended with Deer's death in 1955.²⁵ Seeds were still available for sale a few years thereafter. With all the work attributed to the Deerington Zinnia Gardens, there is no evidence that Ira produced anything new or spectacular in the world of zinnias, but he is the only person known to have founded an entire home industry based on the zinnia.

In the world of art, zinnias began occupying the minds of artists from the late 1800s, when they were reaching their first peak in spectacular forms and colors. Ranging from amateurs, given explicit directions for every aspect of color, to accomplished artists the likes of Vincent van Gogh (1853–1890), zinnias became commonplace in the minds of painters as well as photographers. An example from 1882 concerns the precise manner in which amateurs were to be instructed to apply color to zinnias painted on a plaque,²⁶ while at the other extreme refined zinnia paintings appeared on covers of a magazine devoted to life in the upper classes (see Photospread Fig. 6).

Possibly the most prolific painter of zinnias as well as the least known was the subject of an opera titled Zinnias: The Life of Clementine Hunter, the only opera named for a flower. The artist was Clementine Hunter (1887-1988), the daughter of sharecroppers who was born on a cotton plantation near Cloutierville, Louisiana (see Photospread Fig. 7). Hunter, a self-taught folk artist, took up painting in her 50s, painting every day until several days before her death at 101 years of age. 27 Among her favorite subjects to paint were zinnias, as evidenced by her very first painting in 1939 titled Bowl of Zinnias. This painting was done on a "piece of corrugated cardboard, actually the side of a corrugated box; in her enthusiasm Clementine had apparently used up her entire supply of paint. The oils were laid on with abandon in thick brush strokes and generous dabs. The zinnias seemed to almost come alive, ready to be picked."28 During her 50 years of work, Hunter produced over 5,000 works of art and has sometimes been referred to as the black "Grandma Moses." In 2013 and 2014 one of Hunter's zinnia paintings hung in the Louvre in Paris as part of an exhibition by the stage director and playwright Robert Wilson (1941–).³⁰

Zinnias: The Life of Clementine Hunter, the work of Robert Wilson and others, had its world premiere in 2013. It has been called an intimate

exploration of "one of America's greatest natural talents." ³¹ Clementine Hunter is the subject of half a dozen books, television documentaries, and newspaper and periodical articles, and her work is found in many museums, including the Smithsonian American Art Museum in Washington, D.C., though the latter is a quilt, not a painting.³²

From the esoteric world of art and opera comes the odd role of zinnias in what might be called the practical necessity of human existence. It is a lesser known fact perhaps for most readers that a class of warship³³ built during World War II was named for flowers by Winston Churchill. These ships were called Flower-class corvettes, being small, easily constructed, lightly armed, and maneuverable. If the name "corvette" appears familiar, it is because the Chevrolet Corvette, first unveiled in 1953, was named after this class of ship. The choice of warships named after flowers might seem odd at first glance, but it is said that "the thought of Germany's proud U-boats being defeated by ships named after flowers allegedly appealed to Churchill."34 Over two hundred corvette warships were built beginning in 1940, with their duty solely being to provide protection for convoys in the North Atlantic as part of the Battle of the Atlantic, the war's longest military campaign. 35 Among the list of flower-named mighty corvettes were such ferocities as the Bluebell, the Petunia, and the Candytuft. At the end of the list fell HMS Zinnia K98. And fall it did. The Zinnia, constructed at South Bank-on-Tees, England, in March 1941, was destined for a rather short voyage, being torpedoed by a U-boat less than six months later and sinking off the coast of Portugal.³⁶

Most recently zinnias appear in yet another aspect of human endeavor, this time not on the ocean but rather in outer space. In January 2016 US astronaut Scott Kelly announced that a zinnia had bloomed on the International Space Station. Although touted by some as the first flower to bloom in space, the notion was quickly dismissed when it was demonstrated that as early as 1982 Russians had flowered rockcress in space, and much later a sunflower had bloomed, albeit poorly, in 2012.³⁷ The purpose in specifically growing zinnias was as a testing phase for eventually more useful plants such as tomatoes because of the long growth periods and light conditions associated with both plants. It was also thought that flowering plants might raise the spirits of space station crew members.³⁸

8 A History of Zinnias

The foregoing is but a scant introduction to the common and ubiquitous flowers known as zinnias. What follows is the story of their journey as they grew from once wild weeds, thought to be eyesores, into what has become one of the major flowering successes of today.

About the Author

Eric Grissell was born in Washington, DC, but spent his childhood in the San Francisco Bay Area. After obtaining a PhD in entomology from the University of California, Davis, he began work at the Florida Department of Agriculture and Consumer Services identifying wasps, bees, and ants of agricultural importance. He eventually became a research entomologist for the US Department of Agriculture's Systematic Entomology Laboratory, stationed at the Smithsonian National Museum of Natural History in Washington, DC. He retired after twenty-six years of service and moved first to Arizona and then to Eugene, Oregon. Although primarily trained as an entomologist, Grissell's second love is botany and horticulture. His first book of garden essays, entitled Thyme on My Hands, appeared in 1986, followed by A Journal in Thyme in 1994. Incorporating entomology, botany, and horticulture together, he published the award-winning Insects and Gardens in 2001 and Bees, Wasps, and Ants in 2010. Grissell has published over one hundred scientific papers on insects and a dozen garden essays for popular horticultural magazines.