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Comparative Trials of *Hydrangea paniculata* Cultivars

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VANILLA STRAWBERRY®

Panicle hydrangea (*Hydrangea paniculata*) has long been grown in gardens worldwide, as much for its prodigious floral show and robust habit as for its hardiness and adaptability in a broad array of landscapes. For many years, panicle hydrangea was represented in cultivation by only a few selections, most notably 'Grandiflora', 'Floribunda', and 'Tardiva'. In fact, 'Grandiflora', introduced from Japan in 1862, is over-planted and has naturalized in portions of the eastern United States and Canada. Widespread and continued use of panicle hydrangea is a testament to the popularity and reliability of longstanding and contemporary cultivars alike.

Beginning in the 1970s, notable midsized cultivars such as 'Brussels Lace', 'Greenspire', 'Unique', and 'White Moth' among others were introduced in Belgium by Jelena and Robert de Belder, and many eventually ended up in American gardens. More recent plant development has increased the number of cultivars in the marketplace considerably, with much of the breeding and selection focused on enhanced flower colors and/or compact habits. Contemporary cultivars such as GREAT STAR™, LITTLE LIME®, and VANILLA STRAWBERRY® are popular because of their distinctive floral traits irrespective of plant size. Many of the newer introductions—coming from national and international breeders—are marketed in the United States through brands such as FIRST EDITIONS® (Bailey Nurseries), MAGICAL® (Plants Nouveau), and ColorChoice® (Proven Winners and Spring Meadow Nursery).

Hydrangea paniculata, native to eastern and southern China, Siberia, and Japan, is one of approximately 50 *Hydrangea* species worldwide, including other important garden shrubs and vines such as *H. anomala* ssp. *petiolaris* (climbing hydrangea), *H. arborescens* (smooth hydrangea), *H. macrophylla* (bigleaf hydrangea), and *H. quercifolia* (oakleaf hydrangea). The origin of the genus name—*hydor* meaning “water” and *aggeion* meaning “vessel”—refers to the cup-like fruit capsules. The specific epithet describes the arrangement of the flowers in a panicle, which is a many-branched inflorescence with multiple flowers clustered on each branch. The hydrangea family (Hydrangeaceae) consists of more than 200 species of trees, shrubs, vines, and herbaceous plants globally.



GREAT STAR™



Lace-cap inflorescence of QUICK FIRE™

The signature ornamental attribute of panicle hydrangea is the robust inflorescences, which bloom on stout branches during the dog days of summer when many shrubs have finished flowering. Inflorescences range from 6 to 12 inches long but can be bigger; in fact, cultivars have been selected for larger, fuller flower heads. The panicles, comprised of both sterile and fertile florets, are often distinctly pyramidal or conical but are sometimes blunt-topped or rounded in outline. The yellowish white fertile florets are small, fragrant, and not intrinsically showy; nevertheless, butterflies and bees are common and bountiful pollinators. The showier sterile florets, varying in size from less than an inch to several inches wide, provide a dramatic, long-lasting floral show. The white to creamy white sterile florets are comprised of four or occasionally five ovate to elliptic petal-like sepals per floret. Regardless of shape or size, inflorescences may be designated as lace-cap or mop-head, although these terms are more commonly applied to the domed corymbs of bigleaf hydrangea. Lace-cap inflorescences feature numerous fertile florets and far fewer sterile florets arranged on the outside of the panicle. Mop-heads on the other hand contain an overabundance of densely clustered sterile florets with any fertile ones hidden within.

Sterile florets usually turn shades of pink in midsummer, remaining colorful into the late season. Recently, cultivars have been introduced that initiate color transformation earlier in the summer and/or that intensify the pink, magenta, and red of maturing blossoms. When summer color fades, the russet-tan sepals and fruit capsules provide some color and structural interest in autumn and winter landscapes. Flowers are produced on new or current season's wood, so late winter pruning to reduce plant size or to shape the habit does not decrease flower production. Many gardeners report that annual pruning increases the size of inflorescences.

The deciduous dark green leaves are typically 3 to 6 inches long and half as wide and arranged oppositely on stout branches. The simple leaves are elliptic to ovate in outline with serrate margins. Fall color is yellow-orange to yellowish green and not typically ornamentally significant. Stem color varies from reddish brown to red among the cultivars; some selections feature more intensely colored stems that contrast beautifully with the white summer flowers and enhance the aging pink florets. Older bark is gray and often peeling. *Hydrangea paniculata* ranges from 10 to 20 feet tall at maturity, although most cultivars tend to be shorter. Pruning stems to half their height annually in late winter to early spring before leaves emerge further reduces plant size.



Monarch butterfly on 'Chantilly Lace'



Colorful stems on FIRE LIGHT®



Fruit capsules on 'Burgundy Lace'

Hydrangea paniculata is hardy in USDA Zones 3 to 8 and is considered the cold-hardest species. Moist, well-drained soils in full sun to light shade ensures strong growth and good flower production. Plants are shallow-rooted so consistent moisture is essential, particularly in warmer and drier climates. Panicle hydrangeas are tolerant of most urban conditions including salt spray, but foliar chlorosis may be an issue in alkaline soils. Bacterial wilt, leaf spot, powdery mildew, rust, aphids, mites, and nematodes are potential problems. Maintenance requirements are minimal. Annual pruning is often recommended but not necessary except to reduce plant size or to shape the habit. Accounts vary on whether annual pruning improves stem strength or enhances inflorescence size.

Panicle hydrangea's workaday character gives way to something extraordinary at the onset of its impressive flowers. From midsummer onward, panicle hydrangeas put on a distinctive and dynamic flower show—the progression from creamy white to rich pinks and reds is delightful regardless of the size or fullness of the flower heads. Panicle hydrangeas are reliable hardy shrubs for woody and mixed borders, massed plantings, and hedging. While well-suited to a variety of landscapes, many cultivars are too large for small gardens; 'Dharuma', LITTLE QUICK FIRE®, and BOBO® are few of the compact selections for when space is limited.



Hydrangea paniculata foliage



'Little Lamb'

The Evaluation Study

In October 2019, the Chicago Botanic Garden (USDA Hardiness Zone 5b, AHS Plant Heat-Zone 5) completed a 20-year trial of *Hydrangea paniculata* cultivars. Patent similarities between extant cultivars as well as an ongoing influx of new cultivars from Europe and the United States were reasons for initiating and extending the trial longer than usual. There were three distinct phases of the trial corresponding to the commercial availability of specific cultivars (see Table 1); 45 cultivars in total were evaluated along with the species. The first trial—1999-2005—was comprised of readily available cultivars including older selections such as ‘Floribunda’ and ‘Unique’; the second trial—2003-2011—added cultivars imported from Europe that were uncommon in the United States at the time such as ‘Big Ben’ and ‘Phantom’; and the third trial—2011-2019—included contemporary cultivars such as BOBO® and VANILLA STRAWBERRY® as well as other more recent introductions.

Three plants of each taxon were grown in side-by-side plots for easy comparison of ornamental traits and landscape performance. The evaluation garden was openly exposed to wind in all directions and received up to 10 hours of full sun daily during the growing season. The clay-loam soil had a pH of 7.4 during this period, and although typically well-drained, the site occasionally retained excess moisture for short periods in all seasons.

The origin of the genus name—*hydor* meaning “water” and *aggeion* meaning “vessel”—refers to the cup-like fruit capsules.

Maintenance practices were kept to a minimum, thereby allowing the plants thrive or fail under natural conditions. Trial beds were irrigated via overhead sprinklers as needed, mulched with composted leaves once each summer, and weeded regularly. Moreover, plants were not deadheaded, fertilized, winter-mulched, or chemically treated for insects or diseases. Due mainly to limited bed space, the hydrangeas were cut back by one-half annually in late winter beginning the second year of their respective trials.

Table 1: Trial Periods

<i>Hydrangea paniculata</i>	Trial Years
ANGEL'S BLUSH™ 'Ruby'	1999-2005
'Angustipetala'	1999-2005
'Boskoop'	1999-2005
'Brussels Lace'	1999-2005
'Floribunda'	1999-2005
'Greenspire'	1999-2005
'Kyushu'	1999-2005
PINK DIAMOND™ 'Interhydia'	2000-2006
'Tardiva'	1999-2005
THE SWAN™ 'Barbara'	2002-2007
'Unique'	1999-2005
'Webb'	1999-2005
'White Lace'	1999-2005
'White Moth'	1999-2005
<i>H. paniculata</i>	2000-2005
'Big Ben'	2003-2011
'Burgundy Lace'	2003-2011
'Dharuma'	2005-2011
'Dolly'	2003-2011
LIMELIGHT® 'Zwijnenburg'	2003-2011
'Little Lamb'	2004-2011
'Mega Pearl'	2003-2011
'Phantom'	2003-2011
'Pink Lady'	2003-2011
QUICK FIRE® 'Bulk'	2005-2011
'Silver Dollar'	2003-2011
'White Lady'	2003-2011
BOBO® 'ILVOBO'	2013-2019
'Bombshell'	2011-2019
'Chantilly Lace'	2011-2019
FIRE AND ICE™ 'Wims Red'	2012-2019
FIRE LIGHT® 'SMHPFL'	2013-2019
GREAT STAR™ 'Le Vasterival'	2011-2019
HONEYCOMB™ 'Revival'	2011-2019
LITTLE LIME® 'Jane'	2011-2019
LITTLE QUICK FIRE® 'SMHPLQF'	2013-2019
MEGA MINDY® 'Ivomindy'	2013-2019
PASSIONATE™ 'Paszam'	2013-2019
PILLOW TALK® 'SMHPZIND'	2013-2019
PINKY-WINKY® 'Dvppinky'	2010-2019
POLAR BALL™ 'WRHPBB2'	2013-2019
'Skylight'	2011-2019
SWEET SUMMER™ 'Bokrathirteen'	2012-2019
TICKLED PINK® 'HYPMAD II'	2011-2019
VANILLA STRAWBERRY® 'Renhy'	2011-2019
WHITE DIAMONDS® 'HYPMAD I'	2011-2019

The Performance Report

All panicle hydrangeas were evaluated for a minimum of six years and were regularly assessed for their adaptability to the soil and environmental conditions of the evaluation garden; disease and pest issues; winter hardiness and survivability; and ornamental qualities associated with floral display, foliage, and plant habits. The final performance ratings shown in Table 2 are based on flower production and floral impact, foliage and habit quality, and plant health and vigor. Winter hardiness was not factored into the final rating because there were no stem injuries or plant losses attributed to cold temperatures observed, nor were there any other winter-related problems.

Several nomenclatural issues were uncovered in the preparation of this report. Cultivar and trademarked names for certain plants occasionally differed between the U.S. and European markets. Reasonable efforts were made to cite cultivar and trademark names correctly; however, some nomenclature remains unverified. HONEYCOMB™ is listed as the tradename for both 'Revival' and 'Levana'; PINK DIAMOND™ ('Interhydia') is also commonly listed as 'Pink Diamond'; LIMELIGHT™ is frequently sold as 'Limelight'; and 'Big Ben' and 'Dolly' are both listed as ROYAL STAR™. In this instance, it is possible that ROYAL STAR™ is a series name that has been erroneously applied as a cultivar name. The increased use of tradenames in lieu of the nonsensical cultivar names is commonplace,

which challenges naming conventions and can lead to the misuse of tradenames. Inconsistencies in the use of ™ and ® symbols assigned to a specific tradename also adds to the confusion.

Top-rated Panicle Hydrangeas

Eight cultivars earned five-star excellent ratings for their commanding floral displays, strong habits, and superior overall garden performances. The top-rated selections, listed alphabetically by cultivar or tradename, were evaluated in the second and third trials between 2003 and 2019. All cited plant sizes reflect an annual late winter pruning to reduce stems by one-half their height.

'Big Ben' featured a smattering of creamy white sterile florets in airy, distinctive conical inflorescences. The sterile florets turned deep pink to magenta in late August, about a month after first opening. Flowers remained ornamental well into October after turning tan with a pink blush. With annual pruning, 'Big Ben' eventually reached 6 feet tall and nearly 7 feet wide. Red stems enhanced the floral display at all color stages and stems were strong enough to hold the 10-inch-long trusses upright. 'Big Ben' arrived at the Chicago Botanic Garden from Europe in 2000 along with 'Dolly', 'Phantom', 'Silver Dollar', and 'Zwijnenburg' (LIMELIGHT®); cuttings were taken from stock plants and the propagules were planted in 2003.



'Big Ben'



HONEYCOMB™

FIRE AND ICE™ ('Wims Red') was a consistent top-performer based on flower display and habit quality. The 8-inch pyramidal inflorescences, roughly as wide as tall, opened white and began changing to pink in late July to early August; the color darkened to red by autumn. The frothy look of the flowers was due to the many fertile florets accented by large sterile florets. Dark red to deep burgundy stems were a significant attribute setting FIRE AND ICE™ apart from most cultivars. Even with annual pruning, plants were 68 inches tall and 77 inches wide, which was nearly at the top of the expected height range of 3-6 feet.

The lacy flowers of HONEYCOMB™ ('Revival') were one of the largest at 12 inches long and 8 inches wide. The pyramidal clusters were primarily fertile florets interspersed with large sterile florets. At nearly half an inch wide, the fragrant creamy white fertile florets were bigger and showier than typical and attracted large numbers of bees. Unlike most of the hydrangeas, the white sterile florets did not have a pink stage, instead turning brown in mid-September. The droopiness of the dark green leaves was initially thought to be a wilting issue; however, it was concluded to be a unique quality of the cultivar rather than a problem based on the consistency of this trait and the observable good health of the plants.



FIRE AND ICE™



LIMELIGHT®



LITTLE LIME®

The rotund inflorescences of LIMELIGHT® ('Zwijnenburg'), overstuffing with sterile florets, opened chartreuse, turned greenish white, and aged to green with a pink tinge by late September. The late mix of light green, pink, and browning flowers was surprisingly ornamental to the end of October. Stems were not strong enough to support the plump flower heads the first year in the trial, but stems were sturdier in subsequent years after annual pruning. The inflorescences—9 inches long and 7 inches wide—were well distributed over the generous habit, which reached 70 inches tall and 100 inches wide in nine years.

LITTLE LIME® ('Jane'), touted as a compact form of LIMELIGHT®, was comparable but not simply a smaller clone of it. The sterile florets opened light lime-green and transitioned to creamy white with yellow tones in summer. Flowers turned light green again in September, adding a soft pink blush. The bluntly pyramidal to nearly rounded panicles were 6 inches long and wide at maturity. Flower production and distribution were as good as LIMELIGHT® but on much shorter plants—46 inches compared to 70 inches tall.

LITTLE QUICK FIRE® ('SMHPLQF') is a compact version of QUICK FIRE®, reaching 39 inches tall compared to the nearly 6-foot height of the original. Within a few weeks of opening in late June, the sterile florets began turning pink-purple. By mid-August, the lace-cap inflorescences, to 8 inches long and 6 inches wide, were deep magenta. LITTLE QUICK FIRE® featured red stems and dark green leaves.



LITTLE QUICK FIRE®



PINKY-WINKY®

The lace-cap flowers of PINKY-WINKY® ('Dvppinky') featured a distinctive two-tone display—the sterile florets turned dark pink from the bottom upward, which accentuated the fresh white flowers at the tips. The color shift began in late August, becoming mostly magenta-pink in September and remaining colorful into October. Sturdy red stems held the sizeable—11 inches tall and 7 inches wide—conical trusses upright. With annual pruning, PINKY-WINKY® was 55 inches tall and 65 inches wide by the end of the trial.

The sterile florets of WHITE DIAMONDS® ('HYPMAD I') opened green and turned sparkling white before aging to rosy-pink in mid-August. By late August, flowers turned green again with some pink highlights and pink spotting. The 2-inch sterile florets were large compared to most cultivars; only THE SWAN™ and GREAT STAR™ had larger florets at 3 inches and 3¼ inches, respectively. The lace-cap inflorescences—8 inches tall and 6 inches wide—turned brown by October. Topping out at 53 inches tall, plants were at the lower end of the expected 4- to 8-foot height range.



White Diamonds®

General Observations

Floral, foliar, and habit traits were comparable among taxa in the trials, although subtle to distinct variations were noted. Inflorescences were not all strictly pyramidal in form but varied from strongly pyramidal to broadly rounded to nearly flattened; for example, 'Big Ben', LITTLE LIME[®], and 'Dharuma' displayed these specific panicle shapes, respectively. While not commonly applied to panicle hydrangeas, lace-cap and mop-head conveniently describe the two inflorescent types, which ranged from 4 inches to 14 inches long or tall. Sterile florets ranged from $\frac{3}{4}$ inch to $3\frac{1}{4}$ inches wide; fertile florets were generally $\frac{1}{4}$ inch wide, except in the case of the $\frac{3}{8}$ inch flowers of HONEYCOMB[™]. Sepals of the sterile florets were typically ovate to obovate and held flat to slightly cupped. Pollinators, especially bees, were commonly observed on all lace-cap selections.

The sterile florets of most cultivars turned some shade of pink in the summer; however, 'Bombshell', GREAT STAR[™], and HONEYCOMB[™] remained white until turning brown in September. Early browning was not enough to render a flower show inferior or to automatically reduce ratings, except in cases where the pink stage was fleeting, and/or browning occurred rapidly. For example, in 2012 and 2013, VANILLA STRAWBERRY[™] turned brown quickly after the color change began in mid-August, resulting in reduced overall ornamental ratings in both years. No cause was determined, but in subsequent years, the flowers exhibited the expected color gradation of strawberry red, light pink, and creamy white from the bottom upward before turning tan in early October. Although variable in length depending on cultivar, the pink stage usually began in late August to early September, but newer cultivars such as QUICK FIRE[™] and FIRE AND ICE[™] showed color change as early as mid-July to early August. Other taxa that regularly began

coloring up by mid-August included BOBO[™], FIRE LIGHT[™], LITTLE LIME[™], MEGA MINDY[™], PINKY-WINKY[®], POLAR BALL[™], SWEET SUMMER[™], TICKLED PINK[™], VANILLA STRAWBERRY[™], and Peak bloom—when most fertile florets were open and/or sterile florets were full-sized—occurred approximately one month after flowers opened. A bloom period is usually delineated by the first and last open flowers; however, in the case of panicle hydrangea, the bloom period was more appropriately characterized as the floral display period since it extended beyond anthesis to the point when the sterile florets turned tan. For most cultivars, this period ended in late September to early October, although 'Kyushu' remained light green until mid-October. The sterile florets of 'Brussels Lace', 'White Moth', and the species were the earliest to open in mid-June, and subsequently turned brown by mid-August before any other taxa. 'Dharuma' opened in mid-June too but remained colorful until early September.

Foliage color did not vary significantly between taxa, whether in summer or autumn. The medium to dark green leaves typically turned yellow with orange or reddish tones in autumn. The best fall display was observed on QUICKFIRE[®], with a strong orange color. Stem color ranged from reddish brown to red and was comparable among most cultivars. Taxa that exhibited especially deep red to burgundy stems included ANGEL'S BLUSH[™], 'Chantilly Lace', FIRE AND ICE[™], LITTLE QUICK FIRE[™], MEGA MINDY[™], PINKY-WINKY[®], TICKLED PINK[™], and VANILLA STRAWBERRY[™].

All plant habits were uneven to irregular when planted. Habit quality issues were more prevalent in the first few years of a trial and improved naturally with age or were helped by shaping during the annual pruning process. However, in several cases, regular pruning did not overcome natural growth patterns, such as lopsided branching,



'Big Ben'



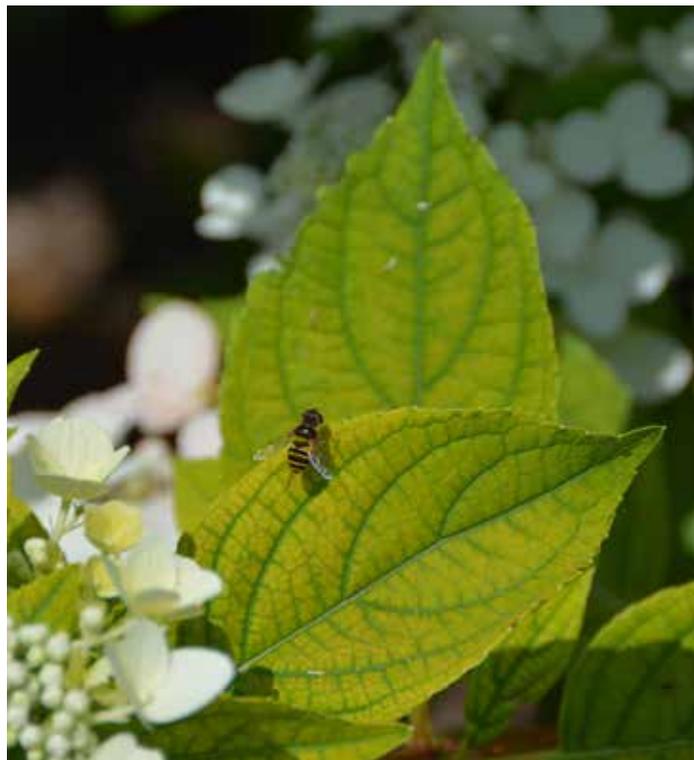
Floppy habit of 'Bombshell'

open areas within crowns, and/or long vigorous shoots arising randomly during the growing season. 'Bombshell' exhibited the weakest habit of any taxon—each year the stems were pulled down, exposing open centers during the flowering period; no recovery occurred later in the season. Conversely, the heavy flowers of VANILLA STRAWBERRY™ arched the stems slightly, which accentuated its fountainlike habit. Snapped branches and floppy stems were periodically observed on PILLOW TALK® and POLAR BALL™, although these traits were not noted in all years. Vertical stems randomly arising out of a plant created a two-tiered effect, which resulted in lower habit quality ratings as well as impacted bloom distribution on 'Mega Pearl', PINK DIAMOND™, QUICK FIRE™, and 'Skylight'. The observed and referenced plant sizes are cited in Table 2; observed heights and widths were affected by annual pruning to reduce plant size due to limited bed space.

The panicle hydrangeas were generally trouble-free. Foliar chlorosis was observed among the hydrangeas in all years, although severity levels were typically minor to moderate and varied by year and by taxon. Chlorosis was generally considered a cosmetic issue rather than a health concern and was not weighted heavily in the final ratings due to its randomness and irregularity. Leaf spotting was an occasional and inconsistent problem, typically infecting less than 20 percent of leaves per plant at any time; during the trial, minor leaf spotting was observed on BOBO®, 'Bombshell', 'Boskoop', 'Chantilly Lace', 'Dolly', FIRE AND ICE™, FIRE LIGHT®, 'Floribunda', GREAT STAR™, 'Green Spire', HONEYCOMB™, LITTLE LIME®, LITTLE QUICK FIRE®, MEGA MINDY®, PASSIONATE™, PINK DIAMOND™, 'Pink Lady', PINKY-WINKY®, POLAR BALL™, 'Skylight', SWEET SUMMER™,

TICKLED PINK®, VANILLA STRAWBERRY®, 'Webb', WHITE DIAMONDS®, and 'White Lace'. Severe infections were observed in 2017 only on BOBO®, FIRE AND ICE™, MEGA MINDY®, and PINKY-WINKY®. Deer browsing was occasionally observed but occurrences were random, and damage was insignificant in each instance.

All taxa were fully cold-hardy in Zone 5b; no plant losses or stem dieback was observed. Per trial parameters, maintenance provided to the hydrangeas was kept to a minimum. However, beginning after their first winter in the ground, plants were pruned annually in March to reduce their height by approximately one-half. Additionally, attempts were made as needed to correct irregular or lopsided habits during the pruning process. Inflorescences were not removed prior to late winter pruning. The convention or common belief is that regularly pruning panicle hydrangeas will result in larger inflorescences and stronger stems. Lacking a control for comparison, it was impossible to make a definitive determination regarding the effect of pruning on flower size in our trials. Furthermore, our observations concluded that while plants were generally strong-stemmed, this trait could not be attributed solely to yearly pruning. An exception was noted in the case of LIMELIGHT®, where lax flowering stems were observed the summer it was planted; in subsequent years, with annual late-winter pruning, stems were sturdy enough to support its heavy blooms. Only 'Bombshell' exhibited weak stems even with annual pruning. Stems were pulled to the ground when flowers were at peak, giving 'Bombshell' a consistently inferior habit and a poor overall rating.



Foliar chlorosis on FIRE AND ICE™



'Skylight'

Summary

Panicle hydrangeas have a long history in cultivation due to their exceptional floral displays as well as for their dependability and easy culture. For many years, panicle hydrangeas were represented in landscapes by a few overused cultivars but since the 1990s, a plethora of fresh, innovative cultivars have found their way into gardens and landscapes. More recently, a marked increase in trademarked introductions reflects changes in the nursery industry and greater market competition for new products. In fact, the next generation of panicle hydrangeas are coming to gardeners now with names such as LIMELIGHT PRIME®, MOONROCK™, and LITTLE HOTTIE™.

The Chicago Botanic Garden's *Hydrangea paniculata* trials included a variety of old and new introductions, representing 45 cultivars that were commercially available in the United States between 1999 and 2019. While nearly two-thirds of the trial plants received high overall ratings, eight cultivars earned superior ratings for their impressive floral displays, strong habits, and overall garden performance. The five-star winners were 'Big Ben', FIRE AND ICE™, HONEYCOMB™, LIMELIGHT®, LITTLE LIME®, LITTLE QUICK FIRE®, PINKY-WINKY®, and WHITE DIAMONDS®.

The floral display is the primary ornamental aspect of panicle hydrangeas. The size and architectural quality of the inflorescences are enhanced as the showy florets undergo a colorful metamorphosis from white to shades of pink and red. This gradual color shift is enhanced in some cultivars, such as VANILLA STRAWBERRY®, which features an exceptional peak show of creamy white, light pink, and strawberry red. Beyond the trend to intensify the pinkness of the aging blossoms, compact selections are also more prevalent. Heights and widths up to 15 feet or larger are possible, although something closer to 6-8 feet tall is more common and even shorter cultivars have been introduced in recent years.

The panicle hydrangeas proved to be fully winter-hardy, generally healthy, and not overly troubled by pests or diseases. Alkaline pH in the trial garden caused foliar chlorosis on some hydrangeas in most years but it was considered cosmetic rather than a health concern because vigor was not reduced. Plants were cut back by one-half their height in late winter each year, primarily due to space limitations in the plot. Since panicle hydrangeas bloom on new growth, late winter pruning does not impact flower production.

Whether as plump mop-heads or frothy lace-caps, panicle hydrangeas put on a show of color and texture that seems both commonplace and exotic at the same time. The fresh creamy whiteness of midsummer gradually ripens to pink and red tones by autumn. In winter, the faded flowers add a bit of color and structure, especially rimed with frost, or set against a snowy backdrop. Panicle hydrangeas are suited to mixed borders, in massed plantings, and as hedging in a variety of landscapes, from residential to commercial to public. The panicle hydrangeas were among the most popular trials at the Chicago Botanic Garden. In the peak flowering season, their spectacular flowers made a lasting impression on our staff and visitors alike.

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Royal Horticultural Society, England. rhs.org.uk

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Table 2: Observed plant traits and performance ratings

Final Rating¹	<i>Hydrangea paniculata</i>	Flower Color²	Sterile Floret Width/Panicle Length	Floral Type	Floral Display Period³	Flower Production	Plant Height	Plant Width	Referenced Plant Size⁴	Trial Period
★★★★	<i>Hydrangea paniculata</i>	creamy white	1¼ in./6 in.	lace	mid-Jun to mid-Aug	good	56 in.	70 in.	8-15 ft. x 6-12 ft.	1999-2005
★★★★	ANGEL'S BLUSH™ 'Ruby'	white, dark pink to red	1¼ in./10 in.	lace	late Jul to late Sep	excellent	73 in.	102 in.	8-12 ft. x 6-10 ft.	2000-2006
★★★★	'Angustipetala'	white, pink	1½ in./6 in.	lace	late Jul to late Aug	excellent	48 in.	52 in.	no reference	1999-2005
★★★★★	'Big Ben'	white, deep pink to magenta	1½ in./10 in.	lace	late Jul to early Oct	excellent	72 in.	80 in.	6-8 ft. x 5-7 ft.	2003-2011
★★★★★	BOBO® 'ILVOBO'	white, pink	¾ in./5 in.	mop	early Jul to early Oct	excellent	34 in.	39 in.	2½-3 ft. x 2½-3 ft.	2013-2019
★★	'Bombshell'	white	1½ in./9 in.	mop	early Jul to early Oct	good	41 in.	59 in.	2-3 ft. x 3-4 ft.	2011-2019
★★★★	'Boskoop'	white, magenta-pink	1¼ in./11 in.	lace	late Jul to late Sep	good	52 in.	60 in.	no reference	1999-2005
★★	'Brussels Lace'	white, light green	1½ in./8 in.	lace	mid-Jun to mid-Aug	good	58 in.	72 in.	6 ft. x 6 ft.	1999-2005
★★★★	'Burgundy Lace'	white, deep pink	1½ in./10 in.	lace	mid-Jul to early Oct	excellent	60 in.	72 in.	7 ft. x 7-8 ft.	2003-2011
★★★★★	'Chantilly Lace'	white, light pink	1½ in./11 in.	lace	early Aug to early Oct	excellent	64 in.	66 in.	5-6 ft. x 5-6 ft.	2011-2019
★★★★★	'Dharuma'	white, deep pink	1 in./4 in.	lace	mid-Jun to early Sep	excellent	32 in.	37 in.	4 ft. x 3 ft.	2005-2011
★★★★	'Dolly'	white, tan	1½ in./10 in.	lace	early Jul-early Oct	excellent	62 in.	74 in.	5-6 ft. x 5-6 ft.	2003-2011
★★★★★	FIRE AND ICE™ 'Wims Red'	white, rosy-pink to red	1½ in./8 in.	lace	late Jun to early Sep	excellent	68 in.	77 in.	3-6 ft. x 3-4 ft.	2012-2019
★★★★	FIRE LIGHT® 'SMHPFL'	white, magenta-pink	1¼ in./11 in.	mop	early Jul to Oct	excellent	55 in.	63 in.	6-8 ft. x 6-8 ft.	2013-2019
★★★★	'Floribunda'	white, pink	1½ in./12 in.	lace	mid-Jul to mid-Sep	good	50 in.	72 in.	13 ft. x 8 ft.	1999-2005
★★★★★	GREAT START™ 'Le Vasterhal'	white	3¼ in./11 in.	lace	late Jul to early Oct	good	75 in.	94 in.	6-7 ft. x 7-8 ft.	2011-2019
★★★★	'Greenspire'	greenish white	1¼ in./10 in.	lace	late Jul to mid-Sep	fair	46 in.	75 in.	6 ft. x 6-8 ft.	1999-2005
★★★★★	HONEYCOMB™ 'Revival'	white	2 in./12 in.	lace	late Jul to early Oct	excellent	70 in.	78 in.	10 ft. x 7 ft.	2011-2019
★★★★★	'kyushu'	white, light green	1 in./10 in.	lace	late Jul to mid-Oct	excellent	48 in.	62 in.	5-6 ft. x 6 ft.	1999-2005
★★★★★	LIMELIGHT® 'Zwijnenburg'	greenish white, pink	1½ in./9 in.	mop	mid-Jul to early Oct	excellent	70 in.	100 in.	6-8 ft. x 6-8 ft.	2003-2011
★★★★★	'Little Lamb'	white, pink	7⁄8 in./7 in.	mop	early Jul to mid-Sep	excellent	51 in.	53 in.	4-6 ft. x 4-6 ft.	2004-2011
★★★★★	LITTLE LIME® 'Jane'	greenish creamy white, pink	1 in./6 in.	mop	late Jul to early Oct	excellent	46 in.	67 in.	3-5 ft. x 3-5 ft.	2011-2019
★★★★★	LITTLE QUICK FIRE® 'SMHPLOF'	white, magenta	1¼ in./7 in.	lace	late Jun to late Sep	excellent	39 in.	52 in.	3-5 ft. x 3-5 ft.	2013-2019
★★★★★	MEGA MINDY® 'Ilvomindy'	white, magenta	2 in./10 in.	lace	mid-Jul to early Oct	good	57 in.	65 in.	4-6 ft. x 4-6 ft.	2013-2019
★★★★	'Mega Pearl'	white, pink	1½ in./11 in.	lace	mid-Jul to early Oct	excellent	70 in.	103 in.	8 ft. x 6-7 ft.	2003-2011
★★★★★	PASSIONATE™ 'Paszam'	white, light pink	1¼ in./14 in.	lace	mid-Jul to early Oct	excellent	49 in.	64 in.	8 ft. x 10 ft.	2013-2019
★★★★★	'Phantom'	white, deep pink	1½ in./10 in.	mop	mid-Jul to early Oct	excellent	78 in.	88 in.	6-8 ft. x 6-8 ft.	2003-2011
★★★★	PILLOW TALK® 'SMHPZIND'	white, pink	1¼ in./11 in.	mop	late Jul to early Oct	excellent	54 in.	64 in.	6-8 ft. x 6-8 ft.	2013-2019
★★★★	PINK DIAMOND™ 'Interhydia'	white, deep pink	2 in./8 in.	lace	early Jul to mid-Sep	fair-good	48 in.	58 in.	6-8 ft. x 6-8 ft.	1999-2005
★★★★	'Pink Lady'	white, pink	1¼ in./12 in.	lace	late Jul to mid-Sep	fair-good	58 in.	71 in.	6 ft. x 6 ft.	2003-2011
★★★★★	PINKY-WINKY® 'Dyppinky'	white, magenta-pink	1¼ in./11 in.	lace	mid-Jul to early Oct	excellent	55 in.	65 in.	6-8 ft. x 6-8 ft.	2010-2019
★★★★★	POLAR BALL™ 'WRHPBB2'	white, pink	2½ in./10 in.	lace	mid-Jul to early Oct	excellent	53 in.	57 in.	5 ft. x 5 ft.	2013-2019
★★★★★	QUICK FIRE® 'Bulk'	white, dusky rose	1¼ in./4 in.	lace	early Jul-late Sep	excellent	70 in.	68 in.	6-8 ft. x 6-8 ft.	2005-2011
★★★★★	'Silver Dollar'	white, green-pink	1½ in./10 in.	mop	mid-Jul to early Oct	excellent	55 in.	87 in.	6-8 ft. x 6-8 ft.	2003-2011
★★★★★	'Skylight'	creamy white, light pink	1¼ in./9 in.	mop	late Jul to late Sep	excellent	75 in.	93 in.	6-12 ft. x 6-8 ft.	2011-2019
★★★★★	SWEET SUMMER™ 'Bokrathirteen'	creamy white, light pink	1 in./9 in.	mop	late Jul to early Oct	excellent	56 in.	69 in.	4-5 ft. x 4-6 ft.	2012-2019
★★★★	'Tardiva'	white, pink	1¼ in./11 in.	lace	early Aug to early Oct	good	60 in.	68 in.	8-12 ft. x 7-10 ft.	1999-2005
★★	THE SWAN™ 'Barbara'	white	3 in./10 in.	lace	mid-Jul to early Oct	fair	43 in.	45 in.	6 ft. x 6 ft.	2002-2007
★★★★★	TICKLED PINK® 'HYPMAD II'	white, magenta-pink	1¼ in./12 in.	lace	late Jul to early Oct	excellent	44 in.	60 in.	4-6 ft. x 5-6 ft.	2011-2019
★★★★★	'Unique'	white, pink	1½ in./13 in.	lace	late Jul to late Sep	good	78 in.	94 in.	6-10 ft. x 6-10 ft.	2000-2005

Table 2: Observed plant traits and performance ratings

★★★★	VANILLA STRAWBERRY® 'Renhy'	white, pink	1 in./12 in.	mop	late Jul to early Oct	excellent	64 in.	79 in.	6-7 ft. x 4-5 ft.	2011-2019
★★★	'Webb'	white, pink	1¾ in./11 in.	mop	mid-Jul to mid-Sep	good	48 in.	65 in.	6-10 ft. x 3-7 ft.	1999-2005
★★★★★	WHITE DIAMONDS® 'HYPMAD I'	white, green-pink	2 in./8 in.	lace	early Jul to Oct	excellent	53 in.	61 in.	4-8 ft. x 4-8 ft.	2011-2019
★★★★	'White Lace'	white	1¼ in./11 in.	lace	early Jul to early Oct	fair	56 in.	72 in.	no reference	1999-2005
★★★★★	'White Lady'	white, greenish	1¾ in./9 in.	lace	mid-Jul to early Oct	good	64 in.	88 in.	10 ft. x 8 ft.	2003-2011
★★★★	'White Moth'	white, light green	1¾ in./8 in.	lace	mid-Jun to mid-Aug	fair	60 in.	72 in.	6-7 ft. x 7-8 ft.	1999-2005

1 Final Rating: ★★★★★excellent, ★★★★good, ★★★fair, ★★poor, ★very poor

2 Flower Color: primary color, mature color

3 Floral Display Period: inclusive of all color stages of the inflorescence

4 Referenced Plant Size: height x width ranges referenced in publications, websites, etc.



CHICAGO BOTANIC GARDEN

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One of the treasures of the Forest Preserves of Cook County