



The Beauty of Beardtongues

Most gardeners are only familiar with a few popular cultivars of *Penstemon*. Here's a look at the remarkable diversity of lovely flowers in the genus.

BY LARRY DEAVEN

MANY AMERICAN gardeners from the Eastern Seaboard to the Pacific Coast have grown penstemon cultivars such as 'Husker Red' or 'Mexicali Red Rocks', but chances are that very few—especially those who live east of the Rockies—have

grown or even seen species such as *Penstemon spectabilis* or *P. rostriflorus*. This is unfortunate, because this large and diverse genus of native flowering plants deserves much broader inclusion in gardens. As author Robert Nold wrote in *Penstemons*, his wonderful 1999 guide to

the genus, "few genera commonly grown in gardens have been as misunderstood as *Penstemon*, and few have as much overlooked potential."

There are approximately 280 species in the genus *Penstemon*, some of which are native to every state in the continental United

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Above: On prairie beardtongue (*P. cobaea*), the white staminode is visible at the tips of the purple flowers. Opposite page: The penstemon cultivar 'Husker Red', growing here at the Lurie Garden in Chicago, was named the Perennial Plant Association's plant of the year in 1996.

States as well as to several Canadian provinces and south into Mexico. Penstemons are beloved for their tubular flowers, which come in many shades of blue and purple, intense reds and pinks, yellows, creams, and whites, drawing an equally diverse pool of pollinators, including hummingbirds and a variety of native bees. Forms range from mats less than one inch high to rigid five-foot-by-three-foot clumps, and nearly every size and shape in between.

Penstemons are also commonly known as beardtongues, because when you look into their flowers you can see a characteristic tongue-like filament, termed a staminode, inside or sometimes protruding from the end. The staminode is frequently covered with white or golden hairs. (For more on how the staminode gave rise to the plant's botanical name, see box, right.)

GARDEN HISTORY

Species penstemons have been in and out of favor as garden plants since the first one was described in western literature in 1748. There are a number of reasons for this, including the emphasis placed on developing cultivars in Europe, and the widespread—and somewhat undeserved—reputation penstemons have as mountain and desert plants that don't grow well outside their native environments. Although perennial in nature, some species tend to be relatively short-lived, but they generally redeem themselves by coming back easily from seed. Another strike against them is that many penstemon seeds contain germination inhibitors, so they require special treatment for successful cultivation (for more on this, see the box on page 21).

WHAT'S IN A NAME?

The name *Penstemon* was coined by John Mitchell, an English physician, in a treatise published in 1748. He proposed *Penstemon* as a genus title for a newly discovered plant that is now known as *P. laevigatus*. Although a written record has not been found, Mitchell probably formed the name by combining “pen,” an English prefix derived from the Latin *paene*, meaning “almost,” and *stamon*, a Greek word for “filament.”

With the general meaning “almost a stamen,” Mitchell seemed to be comparing the sterile stamen (staminode) found in penstemon flowers to the staminode found in the closely related genus *Chelone*. Some *Chelone* species had been described prior to 1748, and the sterile stamen in these flowers is short and undeveloped.

Mitchell thought the long and developed staminode in his new flower was sufficient reason to call it a new genus.

In 1753, in the *Species Plantarum*, botanist Carl Linnaeus included Mitchell's new flower in the genus *Chelone*. Linnaeus retained the name *Penstemon*, but changed the spelling to *pentstemon* and used it as a species title in the genus *Chelone*: *Chelone pentstemon*.

In 1769, Mitchell republished his original treatise, retaining the original spelling of *Penstemon*, and re-establishing his claim that it was a new genus.

In the late 1700s and early 1800s, new discoveries by botanists clearly established that penstemons comprised a new genus, but they retained the spelling used by Linnaeus. It took 120 years of misspelling until botanists rediscovered Mitchell's work and changed the spelling back to the original *Penstemon*. Despite that, many gardening authors continued to use the Linnaeus spelling until the 1950s.

Even now, in the 21st century, many wildflower manuals continue to incorrectly state that the name *Penstemon* means five stamens or fifth stamen. As noted earlier, *Penstemon* means “almost a stamen.”

—L.D.

My views on penstemon adaptability have been transformed over the last six years during the course of my volunteer work designing and constructing a garden devoted to penstemons at the Nature Center in Los Alamos, New Mexico, near where I live. Here some 200 species from all over the country grow side-by-side. The only climatic limitation seems to be winter hardiness.

Home gardeners in different regions have also chronicled their experience growing penstemons, including a Maine gardener—writing in an earlier incarnation of this publication—who related success with 100 penstemon species. Similar accounts from states such as North Carolina, Montana, and Oregon provide ample evidence that a large number of species penstemons can be grown in many regions of the country.

While penstemons as a whole tend to thrive in regions with free-draining sandy or rocky soils, my experience indicates that, no matter the soil type, success for many species is possible in all but the wettest climates. In some cases, careful site selection and soil preparation is needed (see the section on “Culture and Care” on page 20).

If you have never grown penstemons, or have only grown the most widely available

Sources

Alplains, Kiowa, CO. alplains.com.

American Penstemon Society.

www.penstemons.org.

(Seed exchange.)

Everwilde Seed Farms Inc., Fallbrook, CA. www.everwilde.com.

North American Rock Garden Society.

www.nargs.org. (Seed exchange.)

Toadshade Wildflower Farm, Frenchtown, NJ. <https://toadshade.com>.

Resources

Growing Penstemons: Species, Cultivars and Hybrids by Dale Lindgren and Ellen Wilde. Infinity Publishing, San Bernardino, CA, 2003.

Penstemons by Robert Nold, Timber Press, Portland, OR, 1999.

cultivars, here are 10 fairly adaptable species and a few cultivars I recommend trying in different regions. Each of these plants has survived winter temperatures below 0 degrees Fahrenheit (F). Hardiness zone recommendations are included, but these have limited usefulness for penstemons be-

cause factors such as moisture and exposure play an important role in winter survival.

SAMPLING THE SPECIES

Pineleaf penstemon (*P. pinifolius*, USDA Hardiness Zones 4–9) is a shrubby, eight-inch-tall plant covered with tubular orange-red flowers from late May to July. Native from southern Arizona and New Mexico across the border into Mexico, its name refers to its finely textured foliage. It is an excellent subject for the front of a mixed border and can be used as an edging plant. A variant with yellow flowers is sometimes offered, and if yellow and orange-red plants are grown together, seedlings with intermediate colors will appear. Hummingbirds fight over the flowers.

One of the showiest of the large penstemons, *P. grandiflorus* (Zones 3–9) has a broad native range in the central United States from northern Texas up to the Canadian border. In wild populations, its large flowers are usually pink to pale purple, but the potential color range extends to deep purple, maroon, and white. The two- to four-foot stalks, clad in elegant gray-green foliage, bear flowers on the upper 10 to 15 inches from late spring to early summer.



Pineleaf penstemon is prized for its clumping habit, brightly colored flowers, and fine, needlelike foliage.



The two-inch flowers of prairie beardtongue (*P. cobaea*, Zones 5–8), ranging in color from white to pink to lavender to deep purple, are among the largest in the genus. They bloom on the upper half of two-foot stems from April to August, depending on location. Prairie beardtongue is native from Arizona to Texas and north to Minnesota and Wisconsin, which indicates suitability to a wide range of soil and climatic conditions.

White wand beardtongue (*P. tubaeformis*, Zones 4–9) is a prairie plant found in the wild from Texas to Wisconsin and reportedly naturalized in parts of New England. As its common name suggests, it bears pristine white flowers on two- to three-foot stems from May to July. Planted in clumps, it adds a white cloud to the perennial border. As a bonus, it displays attractive lavender/purple seedpods until hard frost.

The bright red tubular flowers of cardinal beardtongue (*P. cardinalis*, Zones 5–8) bloom on two- to three-foot stems from May to July in its native range, perhaps extending into August in more northerly gardens. Although native only to a narrow

Top left: With elegant white flowers atop statuesque stems, white wand beardtongue stands out in a garden. Bottom left: The bright red flowers of cardinal penstemon are magnets for hummingbirds and bumblebees.



range in Texas and New Mexico, it has proven widely adaptable in gardens across the country. The flowers have evolved for hummingbird pollination, but bumblebees have learned how to puncture the base of the flowers so they can extract the rich nectar.

Native to the region where California, Nevada, Arizona, New Mexico, and Utah intersect, bridge penstemon (*P. rostriflorus*, Zones 5–9) has orange-red flowers similar in size and color to those of pineleaf penstemon. The habit and bloom times of these two species, however, are appreciably different. Bridge penstemon's stems are woody at the base and form a symmetrical mound to about three feet. It begins flowering in mid-July, after most of the spring blooming penstemons have finished, and continues until frost.

Another late-blooming penstemon is *P. richardsonii* (Zones 6–9). This species is native to the Pacific Northwest from Oregon to British Columbia, but it can be

readily grown in gardens from the Southwest to the Northeast. A single plant can form a circular mound three feet across with individual stems two to three feet tall. These stems are covered with attractive light green foliage and, from mid-July to September, with bright pink flowers.

Penstemon clutei (Zones 4–8) is known as the sunset crater beardtongue because of its very limited native range in Arizona, but it is particularly hardy and has been successfully grown in gardens from Texas to Manitoba. Its beautiful light pink flowers, which bloom in June to July, are a striking foil for the bluish green, serrated leaves. A mature plant will reach about three feet by three feet.

Even in a genus with hundreds of beautiful species, showy penstemon (*P. spectabilis*, Zones 6–10) is a standout. The two-foot stems carry shiny, blue-green leaves and, from May to June, flowers with deep blue or blue-purple lobes and tubes with pink and blue pigments. Tiny hairs on the tubes reflect light, causing the pink and blue pigments to vary in intensity throughout the day. This species is native to southern California but, in my experience, can survive winter temperatures below 0 degrees F.

Native to the Southwest, desert penstemon (*P. pseudospectabilis*, Zones 5–8) is a large plant, up to five feet tall, with dark green or blue-green leaves that are fused around the stem. A mature plant produces many hundreds of dark pink flowers from April to July, with an appreciable rebloom in the fall. The large number of flowers and the brilliant colors are striking whether the plant is grown singly or in small groups.

HARDY CULTIVARS

While many of the European hybrids are not suitable for regions with cold winters, there are several cultivars that are completely hardy and bear the grace and delicate beauty of the species penstemons. Perhaps the best known of these is ‘Husker Red’, a selection of *P. digitalis* that has white flowers and dark maroon foliage. Widely grown, it has given rise to a number of other named cultivars—including ‘Onyx and Pearls’, ‘Blackbeard’, ‘Dark Towers’, and ‘Pocahontas’—that vary in the intensity of the maroon foliage or have pink pigment in the flowers.

Two other cultivars that have stood the test of time and are commonly available are ‘Red Rocks’, which has pale pink flowers, and ‘Pikes Peak Purple’, which has



Above: The stunning purple flowers of showy penstemon make this species a garden showstopper. **Opposite page:** While blooming, desert penstemon is visited by a variety of pollinators.

violet-purple flowers. These cultivars have complex parentage that involves both Mexican and American species.

Although they are relative newcomers, ‘Twizzle Scarlet’ and ‘Twizzle Purple’ have distinguished themselves by earning a Fleuroselect Gold Medal and an All-America Selections Silver Medal, respectively. Growing 25 to 30 inches tall, these siblings are hybrids derived from *P. barbatus*.

CULTURE AND CARE

Most penstemons thrive in a site in full sun or with limited shade. A few species, including *P. hirsutus* and *P. digitalis*, will tolerate sites in half-shade. They are generally tol-

erant of a range of soil pH levels, but neutral to slightly alkaline soil is ideal for most species. They do not benefit from organic soil amendments or organic mulches, and they thrive in mineral soils. Soil treatment that enhances drainage is beneficial, especially in regions with more than 25 inches of annual rainfall. A mulch of three to four inches of crusher fines—sometimes called stone or quarry dust—on top of the native soil is highly recommended. The crusher fines provide a well-drained medium for shallow roots while deeper roots can access moisture in the native soil below.

Plants should be deadheaded after blooming, leaving behind a few stems with



seed capsules for self-seeding. Deadheading will also encourage a fall rebloom. Many of the cultivars are suitable for containers, but the root systems of the western penstemons are both deep and widespread, and these species prefer to be planted in the garden.

There is a large amount of published information about how to germinate penstemon seeds. Most of the methods involve two steps: moist stratification (holding moist seeds at or around 40 degrees F) to induce germination, followed by actual germination at a higher temperature (50 to 70 degrees F). For specific germination instructions, see the box on the right. 🌱

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GROWING PENSTEMONS FROM SEED

You can wade through a lot of information about penstemon seed germination, but most of the recommendations boil down to moist stratification: holding moist seeds at or around 40 degrees Fahrenheit (F) to induce germination. Here is a simple and reliable method to accomplish this task. It has been used successfully for seeds from 200 species of penstemons and 40 cultivars.

- Place penstemon seeds between two discs of moist paper towel in a plastic petri dish.
- Incubate moist seeds in refrigerator at 40 to 42 degrees F.
- Check the seeds every few days for signs of germination; this may take anywhere from a week to 132 days, depending on species.
- As soon as you see small roots emerging from a seed, use forceps or tweezers to gently plant the seed in a Jiffy 7 pellet or a two-inch plastic pot filled with seedling mix.
- Place the seedlings under a grow light in a room kept at between 50 to 70 degrees F and be sure to keep the soil moist.
- Return petri dishes to refrigerator and continue to regularly check for additional germination.
- Once the seedlings have two to four pairs of true leaves, transplant them to larger pots.

—L.D.