

Pushing Penstemon



Whether it is vegetative or from seed, this crop makes a great summer snapdragon substitute.

By Rick Schoellhorn
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Phoenix series. (Photos courtesy of Rick Schoellhorn)

As the snapdragon season draws to a close for many of us, we may be looking for some alternatives that help extend the season. I had thought to write a short little article on penstemon, then I started really looking into this plant...Now I'm settling for a short little article on very few penstemon because there are more than 275 species, forms and cultivars out there, and there is no way to ever do justice to the group except possibly by writing a book.

Penstemon species are collectively called the beardtongues. Sounds like the way your mouth feels after a long night, but it actually refers to the way the staminode is furred with tiny hairs. If you start looking into the throats of penstemon this will all become clear; however, for the rest of us, stick with the late-night analogy — whatever helps you to remember this group of plants because they are great performers, and there are many new good cultivars out there. If you haven't seen one before, penstemon looks a little like a gloxinia flower on an angelonia chassis; with a pale or white throat and rich colors on the outside of each flower. I think the releases of the vegetative types are really going to open the market for this genus.

Penstemon is native to almost all of North America, from

Guatemala to Canada. They range from wetland to desert to alpine conditions, can be problematic to produce and have very odd germination requirements. Part of the confusion with this crop relates back to this diversity of origin. Hardiness varies all over the board as well, with some species hardy to -2° F and others dying out when they receive a frost. Luckily, our industry has come along and solved all of our problems. We made hybrids and selected for nursery and home garden performance. So with that,

I am going to leave the species aside for now and look at some of the more mainstream cultivars. For those of you interested in the species, please check out Figure 2, page 18.

CULTIVARS

Vegetative cultivars are making their way onto the market, and the introduction of vegetative forms really simplifies production — cuttings are easy to root, and crop time is shortened. There are three main groups I wanted to touch on. First is Fischer USA's 2006 release

of the Phoenix series. This is a good, relatively short series with large flowers. It has the added benefit of being the result of breeding done by Jason Jandrew of Goldsmith Seed for Fischer. Jason was a graduate of the University of Florida (master's degree), a good friend and a fellow plant nerd, so it is good to see him adding to the richness of the plant world! The series is early flowering and seems to have little response to photoperiod; we'll be trialing it for a Christmas flowering crop this year. Colors range

Culture Quickie: Penstemon

Media. Use a well-drained media with coarse texture and a pH of 5.8-6.4. Because of their origins, most penstemon are pretty tolerant of high pH ranges, but you don't need to do anything differently than you would for other bedding or perennial crops.

Fertilization. Regular fertilization at 75-150 ppm for bedding plants is fine. Since the plants are generally adapted to low-nutrition environments, try to avoid over-fertilizing as it can add height and delay flowering.

Watering. Keep plants on the dry side; they don't like wet feet in most cases. Standard bedding plant watering should be adequate.

Temperature. Great crop for the cool greenhouse, but tolerant of late-season warmth as well; accepts 55-65° F nights and 70-80° F days. You'll probably get better color and shorter plants on the cool end of the spectrum.

Light. Use bright greenhouse conditions to full sun; these plants like bright light. It will help with size and quality, as low light causes stem elongation pretty rapidly.

Propagation. By seed (3- to 15-week germination with species types) or cuttings (1-3 weeks in propagation).

Timing. Excluding propagation time, most cutting crops should come in between six and eight weeks. Seed types may take a bit longer — up to 20 weeks. Usually 1-3 liners/cuttings per gallon.

Pinch. Most suppliers do not recommend a pinch, and standard production is to produce the crop as straight up.

Flowering. No photoperiodic responses known, but plants generally flower in spring while nights are cool; however, many of the warm climate species will continue to flower all summer.

Marketing Season. Spring rules, but look at using this crop to extend sales into summer. We will be looking at scheduling a winter crop in 2005.

PGRs. Definitely a consideration. Try B-Nine (daminozide, Crompton Crop Protection) at 5,000 ppm early in the crop but switch to drenches late in the crop to avoid misshapen flower stalks. Not much work has been done with this crop and the triazoles (like paclobutrazol [Bonzi, Syngenta and Piccolo, Fine Agrochemicals] and uniconazole [Sumagic, Valent]) so experiment with low rates (<1 ppm), and move upward until you find what works under your conditions. Remember to always follow labels.

vegetative matters

from Appleblossom (which is a pale pink, with darker edge) to strong reds and purples. Good for 6-inch or gallon production.

Ball FloraPlant carries three groups of penstemon; The Cathedral series, made up of Pink and Hot Pink; 'Prolific', which is also pink; and 'Husker Red', an old, standard variety, has white to pale lavender flowers with a bronze cast to the foliage. All should be good for the 6-inch to gallon markets. We are looking at the Cathedrals and 'Prolific' in Florida this year.

Proven Winners released the dwarf hybrid 'Lilliput Rose' a couple years ago, and it has been one of my favorites ever since. The plants are in full bloom at about 8

inches and max out at maturity at around 12-14 inches in height. We had excellent trials in winter for Florida with color almost all winter long and into late spring. I even took one of the plants to Anchorage, Alaska, and it performed well there all through the season. So when you find a plant that performs well in both Alaska and Florida, it is usually something pretty durable with a good range across the United States.

Both Kieft Seeds and Ernst Benary of America also carry penstemon from seed, and these both look like very promising releases as well. The Navigator series from Kieft has bright pink, lavender and blue tones with white-throated blooms. The Navigator series has

Figure 1. Some popular penstemons.

CULTIVAR	COLOR	SUPPLIER
Vegetative		
Phoenix series	Appleblossom, Magenta, Pink, Red, Violet	Fischer USA
'Lilliput Rose'	Dwarf - rose pink	Proven Winners
Cathedral series	Pink, Hot Pink	Ball FloraPlant
'Prolific'	Pale pink	Ball FloraPlant
<i>Penstemon digitalis</i> 'Husker Red'	Pale lavender with dark foliage	Ball FloraPlant, Yoder/Greenleaf
<i>Penstemon x gloxinoides</i> 'Sour Grapes'	Purple	Yoder Greenleaf
Patio series	Mix, individual colors	Cohen Propagation Nurseries
<i>Penstemon barbatus</i> 'Elfin Pink'	Pink	Yoder/Greenleaf
<i>Penstemon barbatus</i> 'Prairie Dusk'	Lavender	Yoder/Greenleaf
<i>Penstemon barbatus</i> 'Rondo'	Pink to lavender	Yoder/Greenleaf
Seed		
<i>Penstemon digitalis</i> 'Mystica'	Pale lavender with bronze/purple foliage	Ernst Benary of America
<i>Penstemon digitalis</i> 'Ronda'	Pink	Ernst Benary of America
Navigator series	Dwarf - pinks and blues with green foliage	Kieft Seeds
<i>Penstemon barbatus</i> 'Cambridge Mix'	Mixed colors	Kieft Seeds
<i>Penstemon hartwegii</i> 'Tubular Bells'	Rose and red	Kieft Seeds
Niche Cultivars		
'Petite Bouquet'	Dwarf - lavender and rose tones	Various
<i>Penstemon x 'Apple Blossom'</i>	Deep pink with white throat	Various
<i>Penstemon hartwegii</i> 'Alice Hindley'	Blue to mauve	Various
<i>P. heterophyllus</i> 'Margarita Bop'	Rich blue and lavender	Various
<i>Penstemon x 'Bev Jenson'</i>	Lilac	Various
<i>Penstemon x 'Garnet'</i>	Deep wine red	Various
<i>Penstemon x gloxinoides</i> 'Firebird'	Red	Various
<i>Penstemon x 'Hidcote Pink'</i>	Salmon pink	Various
<i>Penstemon gentianoides</i> 'Holly's White'	White	Various
<i>Penstemon x 'Midnight'</i>	Deep purple	Various
<i>Penstemon x 'Fujiyama'</i>	Pale pink	Various
<i>Penstemon x 'Flamingo'</i>	Coral pink	Various
<i>Penstemon x 'Countess Dalkeith'</i>	Deep purple	Various
<i>Penstemon x 'Mother of Pearl'</i>	White with deep purple markings	Various
<i>Penstemon x 'Snowstorm'</i>	Pure white	Various

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Figure 2. Uncommon penstemon species.

UNCOMMON SPECIES	COLOR	COMMON NAME
<i>Penstemon ambiguus</i>	White	Phlox penstemon
<i>Penstemon baccharifolius</i>	Red orange	Rock penstemon
<i>Penstemon barbatus</i>	Red orange	Red penstemon
<i>Penstemon cardinalis</i>	Red	Cardinal penstemon
<i>Penstemon cobaea</i>	Purple tones	Wild penstemon
<i>Penstemon digitalis</i>	White to pale lavender	Penstemon; beardtongue
<i>Penstemon digitalis</i> 'Albus'	White	White penstemon
<i>Penstemon eatoni</i>	Red	Firecracker penstemon
<i>Penstemon fendleri</i>	Purple	Fendler penstemon
<i>Penstemon grandiflorus</i>	Pinks and purples	Large flowered penstemon
<i>Penstemon ovatus</i>	Pink to purple	Ovate penstemon
<i>Penstemon havardii</i>	Blue	Big bend penstemon
<i>Penstemon hirsutus</i> 'Pygmaeus'	Lavender and white	Dwarf hairy penstemon
<i>Penstemon palmeri</i>	White	Scented penstemon
<i>Penstemon parryi</i>	Pink to red	Parry's penstemon
<i>Penstemon pinifolius</i>	Red	Pineleaf penstemon
<i>Penstemon pseudospectabilis</i>	Red	Canyon penstemon
<i>Penstemon strictus</i>	Blue to lavender	Rocky Mountain penstemon
<i>Penstemon superbis</i>	Red	Superb penstemon
<i>Penstemon tenuis</i>	Blue, pink to lavender	Gulf Coast penstemon
<i>Penstemon triflorus</i>	White to pink	Hill Country penstemon
<i>Penstemon wrightii</i>	Red	Texas rose
<i>Penstemon glaber</i>	Pink to purple with age	Rock penstemon
<i>Penstemon acaulis</i>	Intense sky blue to purple	Stemless beardtongue
<i>Penstemon purpusii</i>	Deep violet purple	Snow Mountain penstemon

a dwarf habit and is early flowering. Benary carries two different hybrids of *P. digitalis* that are good performers, although *P. digitalis* tends to perform slightly better in the Northern parts of the United States. 'Rondo' has green foliage and clear pink flowers on a 2- to 3-foot plant, and 'Mystica' resembles 'Husker Red' but with a better pink color and bronze foliage.

Whether you are more comfortable with seed or vegetative crops, there is a penstemon that will work for you, and I think this group of plants will only become more popular as these hybrids show growers and gardeners how rewarding the crop can be. Market them as premium items, and don't let them get lost in your bedding plant mix.

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For more information on varieties discussed in this article, direct your inquiries to the following companies or your favorite broker.

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