

SUBGENERA: *PENSTEMON*
SECTION: *Peltanthera*
Subsection: *Centranthifolii*

CULTIVATION OF EACH SPECIES
Table 16

[subgenus]	PENSTEMON
[section]	<i>Ambigui</i> <i>Baccharifolii</i> <i>Chamaeleon</i> <i>Coerulei</i> <i>Cristati</i> <i>Ericopsis</i> <i>Fasciculus</i> <i>Peltanthera</i> <i>Penstemon</i>
[subsection]	<i>Centranthifolii</i> (10) <i>Havardiani</i> (3) <i>Peltanthera</i> (15) <i>Petiolati</i> (1)



Penstemon alamosensis

GENERAL DESCRIPTION OF PENSTEMONS IN THIS SECTION

Large and tall, spectacularly beautiful. Many spires of pink to bright red flowers. Leaves in shades of gray or blue-green, leathery, and have a succulent look. All inhabit desert states of the southwest or parts of northern Mexico. Very drought tolerant. Easy to grow in poor soil; need bright sun. Not long-lived.¹²

Location northern Mexico north into desert part of the Intermountain Region, s. CA, e. to TX.

Habitat desert, rocky, dryland

Foliage herbaceous or suffrutescent (almost a shrub)

Shape stems are wand-like

Leaves evergreen, grey or blue-green color, glaucous (leaf surface covered with a fine, waxy powder), glabrous (smooth, hairless) thick, leathery; sometimes

Penstemon alamosensis seedling



serrated (toothed edges); look succulent; often connate-perfoliate

appears to have "pierced: through the leaf pair) ; stems and leaves of seedlings can be quite attractive in the winter, turning various colors of pink

(joined at the base and surrounding a stem, as a pair of leaves; stem

¹ abstracted from Lindgren, Dale and Wilde, Ellen. 2003. "Growing Penstemons: Species, Cultivars and Hybrids." and Way, David and James, Peter. 1998. "The Gardener's Guide to Growing Penstemons."

²



Penstemon wrightii

Plant in bloom

Corolla (flower)



Penstemon wrightii

color bright pink to bright red

size medium to large

shape

Inflorescence (arrangement of flowers along flowering stalk; all the flowers on the stalk): wand like

height 1-4'

shape

Calyx (sepals on underside of flower, collectively; outermost part of the flower)

Cultivation needs southern desert penstemons, or any penstemon blooming in February, March, or April need warm weather prior to bloom date and order to have enough growth to bloom; thus for those growing these species under cover, the cover should not be removed prematurely

Ease of cultivation easy in poor soils where it is dry most of the time

Moisture very drought tolerant; if over watered, will droop.

Sun need bright sun.

Heat tolerance yes

Cold tolerance tolerate fairly cold temperatures.

Shade

Soil poor soil with low organic content.

Drainage sharp drainage needed

Climate preference heat

Longevity short lived, but “must-have penstemons” (Lindgren, D. and Wilde, E. “Growing Penstemons Species, Cultivars and Hybrids”)

Interbreeding natural hybrids within subsection *Peltanthera* are common

Display recommendations large desert motif rock gardens; dryland gardens; as a specimen

Pollinated by hummingbirds, bees, wasps (*Pseudomasarid* ssp), and sphinx moths



Penstemon superbus

Species

<i>alamosensis</i>	<i>parryi</i>	<i>utahensis</i>
<i>centranthifolius</i>	<i>patens</i>	<i>wrightii</i>
<i>cerrosensis</i>	<i>subulatus</i>	
<i>confusus</i>	<i>superbus</i>	



Penstemon wrightii



Penstemon alamosensis and *attenuatus* (background)

Table 16. *Penstemon Peltanthera Centranthifolii*

Key
 Column 1 SPECIES: species name; plant height when in bloom; color(s) of flower; fill in lavender =popular; parenthesis = not reported in cultivation
 Column 3 CULTIVATION SUGGESTIONS:
 Row 1 SIZE OF FLOWER: **very large**=>1 ½“ **large**=1-1 3/8” **medium**= ½ - 1” **small**=< ½“
 Row 2 GENERAL DESCRIPTION
 Row 3: DISPLAY SUGGESTIONS
 Row 4: WHERE SPECIES HAS BEEN SUCCESSFULLY CULTIVATED OUT OF NATIVE HABITAT
 full sun  partial shade or filtered shade

Species	Bloom Season in Native Habitat	Cultivation Suggestions	Cultivation Needs			Elevation and Habitat	Distribution	Reported cold hardiness in cultivation
			Garden Soil	Moisture	Sun			
<p><i>alamosensis</i> 18-30” x 6.2” wide coral-red, orange EASY in NM, CO rare</p>	<p>April-May</p>	<p>medium flower flowers in long beautiful tubes, arranged pretty much on one side of the stalk (subsecund) additional asset is the foliage with thin, crinkled blue-grey leaves fairly long-lived seedlings may bloom in first year accents in large rock garden; CO, NM, e.WA, in a rock wall in VA, s. France</p>	<p>lean, very fast draining non-clay soil.; limestone derived soils are particularly favorable; may do best in improved soils, on slopes</p>	<p>good spring moisture; supplement during summer</p>	<p>  likes afternoon shade</p>	<p>4800-5000’ hot, steep limestone canyons</p>	<p>sc. NM </p>	<p>zones 5-6 to -20°F in Denver, though difficulty with over-wintering has been reported; protect by covering basal rosettes</p>

<i>centranthifolius</i>	Mar-June	medium flower slender scarlet tubes, hanging like decorative pendants; gray-green leaves (glaucous) not hardy below 15° F; protect basal rosette in winter; attracts butterflies and bees as well as hummingbirds cultivated in: CA; success in Denver for 5 years; e.WA in sand and gravel berm	sandy, porous, rocky; pH 6.0-8.0; near-perfect drainage; little organic matter	very drought tolerant once established	☀️ re bloom more likely if in full sun ☀️	sea level-6500' dry slopes in coast ranges and s. Sierras	deserts and foothills of s. CA; Baja California	USDA Zones 5-10
<i>cerrosensis</i>	Mar-April	medium flower early bloom in native setting indicates early heating is necessary for bloom and health unknown unknown	unknown	unknown	unknown	canyons	small island, Cedros, off coast of Baja	unknown
<i>confusus</i>	April-June	large flower does well in cultivation; guidelines in corolla thick gray-green leaves, folded lengthwise looks much like utahensis and patens unknown unknown	rocky, lean scree	spare amount of water after natural bloom season	☀️	3300-7300' sandy, gravelly and clay; with sparse vegetation	w. UT, NV, e. CA 	not hardy below 15° F
<i>parryi</i>	March-April	medium flower widely planted; many stems bear funnel-shaped flowers leaves glabrous, glaucous (smooth and gray-green in color) dryland garden cultivated in: AZ, Willamette Valley OR, VA	sandy, lean scree	water in spring and monsoon season (August)	☀️	1500-5000' s. AZ, n. Sonora, Mexico 	not hardy below 0°	

<p><i>patens</i></p> <p>12-16" x 8.6" wide</p> <p>lavender to pink-magenta</p>	<p>May-June</p>	<p>medium flower beautiful</p> <p>blooms in panicles (branched bloom stalk that blooms from the bottom up)</p> <p>subshrub of blue grey mounds</p> <p>wild flower garden, large arid rock garden</p> <p>cultivated in: reported only in CA, but probably more broadly cultivated as offered by a Colorado seed company</p>	<p>alkaline, rocky, low humous, best to plant on slopes</p>	<p>in spring time, then sparingly like sparse rains in native habitat</p>		<p>6250-9900'</p> <p>sagebrush, pinyon/juniper, ponderosa pine</p>	<p>Mono and Inyo Counties CA, Clark County NV</p> 	<p>zone 6</p>
<p><i>subulatus</i></p> <p>15-24" x 11.7" wide</p> <p>scarlet</p>	<p>April-June</p>	<p>medium flower</p> <p>can form clumps with many stems; tubular flowers hang almost horizontally</p> <p>narrow lance-like leaves, widely spaced, glaucous (grey-green)</p> <p>extended bloom in cultivation unknown</p> <p>cultivated in: s. AZ and NM, probably more widely as offered by a Colorado seed company</p>	<p>sandy, lean soil</p>	<p>water in spring and monsoon season (August)</p>	<p>water in spring and monsoon season (August)</p>	<p>1500-4500'</p> <p>dry hillsides and cliffs</p>	<p>c. and s. AZ, s. NM</p> 	<p>zone 7</p>

<p><i>superbus</i></p> <p>2-3 ½' x 21.5" wide</p> <p>coral to crimson</p>	<p>April</p>	<p>medium flower</p> <p>bloom in tall spires; tubular flowers in up to 15 widely spaced rings/whorls, on the upright stems</p> <p>leaves are thick, rounded, glabrous (smooth) and glaucous (covered with gray green waxy powder); 12" wide basal clump before, but not necessarily during bloom</p> <p>not long lived but well worth growing;</p> <p>may rebloom; "dazzling" (Nold) "spectacular": (Alplains)</p> <p>border; dryland garden</p> <p>cultivated in: CA, OR, WA, CO, VA, NM, AZ</p>	<p>sandy, good drainage</p>	<p>supplemental in dry regions</p>		<p>3500-5000'</p> <p>sandy, gravelly, pinyon/juniper communities</p>	<p>se. AZ, sw. NM, Sonora and Chihuahua Mexico</p> 	<p>zone 5 (with some protection)-6</p> <p>to -20°F in Denver 2007</p>
<p><i>utahensis</i></p> <p>20-36" x 15"</p> <p>red, rose, purple-red</p>	<p>April-June</p>	<p>large flower</p> <p>glistening flowers; very showy, attractive; some but not all report it to be temperamental</p> <p>leaves may be wave (crisped), grey green (glaucous), basal rosette</p> <p>well worth having</p> <p>large rock garden</p> <p>cultivated: widely grown</p>	<p>good drainage; pH 6.0-8.0, rocky scree</p>	<p>drought tolerant; will tolerate garden water if given perfect drainage (Las Pilitas)</p>		<p>4000-7500'</p> <p>desert canyons, mesas, mountains, pinyon/juniper, shadscale and sagebrush communities</p>	<p>CA, UT, NV, AZ</p> 	<p>zone 4</p> <p>to -20°F in Denver 2007</p>

<p><i>wrightii</i></p> <p>2-3' pink-red</p> <p>can be difficult when grown out of native areas</p>	<p>April-May</p>	<p>medium flower</p> <p>lovely and well worth trying; plant several in different locations;</p> <p>if started early can bloom first year; with protection hardy to 0° F;</p> <p>prune all but 1-2 stems after bloom ,</p> <p>give a little extra water for a month and plant will fill out and rebloom</p> <p>for reasons unknown, plant mortality seems to be high after bloom</p> <p>not long lived, but reseeds readily</p> <p>dryland garden sw. TX, s. AZ, s. NM, s. CA, Denver, VA in rock garden; grown in a rock garden in VA, popular in Europe before WW I</p>	<p>sandy, excellent drainage, limey</p>	<p>water sparingly</p> <p>during winter needs dryness and some snow cover to survive;</p>	<p> </p> <p>can survive intense heat if provided with moderate irrigation</p>	<p>limy soils; on “bars and shingles of streams” mountains of w. TX; grasslands</p> <p>n. Big Bend TX</p> 	<p>Zone 6</p> <p>survived minus 20°F Denver with some natural protection</p>
--	------------------	--	---	---	---	---	--

🎵 Help build this data base

for more photos go to:

1. this website, Library tab
2. <http://plants.usda.gov/gallery.html>
3. <http://botu07.bio.uu.nl/spgm-1.4.4/gal/Penstemon/index.php?name=Penstemon%20-%2034k>



Penstemon centranthifolius

with appreciation to Andrea Wolfe