

SUBGENUS: *PENSTEMON*
Section: *Ericopsis* (*Caespitosi*)
Subsection: *Caespitosi*

CULTIVATION OF EACH SPECIES
Table 9

[subgenus]	<i>PENSTEMON</i>
[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>Caespitosi</i> <i>Ericopsis</i> <i>Linaroides</i>

GENERAL DESCRIPTION OF PENSTEMONS IN SECTION *ERICOPSIS* and SUBSECTION CAESPITOSI

Species in the *Ericopsis* section usually are dwarf, subshrubs, and evergreen; their narrow linear leaves remind one of heath.. The corollas, which almost always are blue, have staminodes that are golden-bearded. Most are dryland plants that require low moisture, but high sunlight. Those in the *Ericopsis* subsection *Caespitosi* are admired and loved by all. “Superior, gorgeous plants.”¹



Penstemon teurioides

¹ Nold, Robert. “Penstemons.”

Location west of the Front Range of the Rocky Mountains

Habitat in poor alkaline soils; often grow under or protected by shrubs and evergreens

Foliage

Shape small linear leaves, evergreen, very low, woody-based plants; usually dwarf; mat forming, mounding, or erect and about 8" tall; stems may root at the nodes;

Leaves linear, small, entire (smooth edges); heath-like leaves



Penstemon crandallii

Plant in bloom**Corolla** (flower)**Color** blue**Size** medium**Shape** tubular, sometimes swollen/enlarged (ampliate)*Penstemon teucrioides***Inflorescence:** (arrangement of flowers along flowering stalk; all the flowers on the stalk)**Calyx** (sepals on underside of flower, collectively; outermost part of the flower)**Cultivation needs****Ease of cultivation** may be difficult to grow; most will seed themselves**Moisture** very drought tolerant; must have low moisture**Sun** needs ample sunlight**Heat tolerance** excellent**Cold tolerance** excellent

Shade seem to like the protection of shrubs and evergreens

Soil prefer loose, poor, alkaline soil

Drainage needs to be excellent

Climate preference about Zone 5, 10-20" precipitation

Longevity excellent

Display recommendations dryland garden; subsection *Caespitosi* suitable for the rock garden, or in some cases, troughs; dryland garden

Pollinated by Most penstemons are visited by several bee species including honeybees and bumblebees. While hummingbirds prefer red penstemons, they commonly are seen at most penstemon species.

Interbreeding

Cuttings yes

Species

<i>abietinus</i>	<i>crandallii</i>	<i>ramaleyi</i>	<i>thompsoniae</i>
<i>acaulis</i>	<i>glabrescens</i> (see <i>crandallii</i>)	<i>retrorsus</i>	<i>tusharensis</i>
<i>caespitosus</i>	<i>procumbens</i>	<i>teucroides</i>	<i>yampaensis</i>

Table 9. *Penstemon Ericopsis Caespitosi*

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 ¾” **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

Species	Bloom Season in Native Habitat	Cultivation Suggestions	Cultivation Needs			Elevation and Habitat	Distribution	Reported cold hardiness in cultivation
			Garden Soil	Moisture	Sun			
<i>abietinus</i>	June-July	medium flower delicate, beautiful, not showy stems bent at ground level then erect (decumbent) or erect which arise from prostrate old stems; plant has many branches; flowers in spikes and arranged on one side of the stalk (secund); golden-bearded staminode inside the corolla creeping but upright subshrub with very narrow, dark green leaves; evergreen much like <i>P. linarioides</i> rock garden cultivated in: MT, MI, NY, Eng; offered for sale by a CO seed company and APS seed Exchange suggests general interest in the species	sandy loam	dry	 	5700-7600' pinyon/juniper, oak and sagebrush; gravelly, limestone soil	c. UT 	zone 4

<p><i>acaulis</i> ½-1" x 3" wide</p> <p>light blue</p> <p>may be threatened or endangered</p>	<p>June</p>	<p>medium flower flowering stems very short</p> <p>each solitary flower is nestled in the cushion of foliage are upward facing;; yellow-bearded</p> <p>tufted and forms a tiny cushion;</p> <p>not easy to grow; adults need it dry and sunny</p> <p>closest relative is <i>P. yampaensis</i> trough, wall top, any place easy to see cultivated in: offered for sale by a CO seed company suggesting general interest in the species</p>	<p>probably tolerant of most soils so long as they have good drainage</p>	<p>dry</p>	<p></p>	<p>6000'</p> <p>dry ridge tops in sandstone derived soils with sagebrush and Utah juniper; v. <i>acaulis</i> in dry clay hills of WY and UT</p>	<p>where WY, CO , UT meet</p> 	<p>zone 3</p>
<p><i>caespitosus</i></p> <p>blue to lavender, white within</p> <p>1-2" x 9.8" wide</p>	<p>May-July</p>	<p>medium flower pleasing; grows well</p> <p>leafy single-flowered cymes for a total of two flowers per stem; forms a creeping mat or low mound which is covered with blue, white-throated flowers; red-violet guidelines; golden-yellow bearded staminode</p> <p>linear (thin) or slightly rounded leaves</p> <p>rock gardens, hot sun areas; cultivated in: NM, CO, ND, PA, Ontario</p>	<p>clay and gravel</p>	<p>dry</p>	<p>part day protection</p> <p></p>	<p>6000-10,660'</p> <p>dry plateaus; sandy or clay soils in sagebrush, juniper, pinyon-juniper, oak and ponderosa pine communities</p>	<p>s. WY, nw. CO, c. UT, n AZ</p> 	<p>zone 4</p>

<p><i>crandallii</i></p> <p>2" x 6.2" wide to 1' wide</p> <p>blue, lavender, violet</p> <p>EASY</p>	<p>May-Aug</p>	<p>medium flower</p> <p>outstanding plant; may rebloom</p> <p>stems intricately branched, wand-like or erect with profusion of flowers that are secund (on one side of the stem); woody base; palate (bottom lip of corolla) pale yellow-bearded and staminode densely golden-bearded</p> <p>small subshrub; evergreen; leaves narrowly oblanceolate to narrowly obovoid rather than straight and narrow</p> <p><u>varieties</u></p> <p>v. <i>atratus</i> from western slope of La Sal Mts UT; more prostrate than typical species; profuse flowers</p> <p>long lived; self sows</p> <p>v. <i>glabrescens</i> a mounding subshrub; showy golden staminode; pleasing, long-lived</p> <p>v. <i>procumbens</i></p> <p>rock gardens in crevices</p> <p>cultivated in: WA to east coast; GB</p>	<p>sandy, gravelly</p>	<p>dry</p>		<p>6000-8850'</p> <p>pinyon/juniper woodlands; sagebrush, scrub oak; very rocky scree mixed in with other desert species and a few pines; said to grow on rock surfaces</p>	<p>CO, UT</p> 	<p>zone 4</p> <p>to -20°F in Denver</p>
<p><i>glabrescens</i></p> <p>now: <i>crandallii</i> v. <i>glabrescens</i></p> <p>6"</p> <p>blue to lavender</p> <p>EASY</p>	<p>May-June</p>	<p>medium flower</p> <p>Please see <i>P. crandallii</i> v. <i>glabrescens</i></p>					<p>NM, s. CO</p> 	

<p><i>procumbens</i> now <i>crandallii</i> v. <i>procumbens</i></p> <p>1-4" x 12" wide</p> <p>violet to blue</p> <p>EASY</p>	<p>May-June</p>	<p>small popular; adapts to most climates; forms trailing mats up to 3' wide; upward facing flowers lie on the mat; roots as it spreads; branches drape over rocks, trailing for some distance</p> <p>ovate leaves</p> <p>adaptable to most climates</p> <p>formerly listed as a variety of <i>crandallii</i> but bears little similarity</p> <p>rock garden cultivated in: widely</p>	<p>sandy, gravelly</p> <p>in OR: troughs with mostly pumice and bit of compost to bind it</p>	<p>floriferous when given supplemental water, every two weeks in OR, more frequent in arid Rocky Mts states and arid west</p>	<p>☀</p> <p>some shade in dry areas</p> <p>☀</p>	<p>9800'</p> <p>very rocky scree mixed in with other desert species, few pincs</p>	<p>wc. CO</p> 	<p>Zone 3</p>
<p><i>ramaleyi</i></p> <p>6-8" x 7.8" wide</p> <p>light lavender</p>	<p>unknown</p>	<p>medium flower</p> <p>open, airy mound is filled with flowers; desirable garden plant; blooms in interrupted whorls (a ring of three or more flowers arising from a common node on the bloom stalk) along numerous stems; long bloom season, even in seedling year</p> <p>subshrub with delicate light grey-green thread-like leaves that give a graceful effect</p> <p>rock garden a single plant will display well; or dryland garden if planted in groups cultivated in : Denver</p>	<p>porous</p>	<p>appreciates extra water in seedling year</p>	<p>☀</p> <p>or</p> <p>☀</p>	<p>10,000'</p> <p>alpine</p>	<p>sc CO</p> 	<p>zone 4</p>

<p><i>retrorsus</i></p> <p>3-8" x 7.8" or more wide</p> <p>deep blue</p>	<p>June</p>	<p>medium flower</p> <p>difficult but worth the effort; spreads; well-liked</p> <p>short erect or wand-like spikes with bloom on upper third of the stem; golden-bearded staminode</p> <p>silver-green tufts of narrow leaves</p> <p>long lived;</p> <p>dry rock garden</p> <p>cultivated in: offered for sale by a CO seed company suggests general interest in the species</p>	<p>sandy-gravelly</p>	<p>dry</p>	<p>☀ or ☀</p> <p>dappled shade such as might be provided by the sagebrush cover</p>	<p>5700-6000'</p> <p>among sagebrush, even within the bush itself</p>	<p>w. CO</p> 	<p>zone 5</p>
<p><i>teucroides</i></p> <p>2-3" x 6-12" wide</p> <p>blue, to blue-purple</p> <p>EASY</p>	<p>June-July</p>	<p>medium flower</p> <p>flower-covered mat that spreads; short flower stems; give it room and a few rocks for emphasis; floriferous; reblooms</p> <p>linear (narrow) gray leaves are crowded together; stems rest on the ground</p> <p>much like <i>P. crandallii</i></p> <p>rock garden – give it space and rocks to drape over and around</p> <p>cultivated in: widely, from WA to NY, GB</p>	<p>sand or scree beds; acidic best; neutral-alkaline OK</p>	<p>if drainage is sharp give extra water during hot spells, but do not wait until the plant appears to be under stress and turning brown – could lose entire plant</p>	<p>☀ or ☀</p> <p>dappled shade, or hillside with part day shade</p>	<p>7200-10,000'</p> <p>near Moab, UT @ 5-6000', rocky openings between brush about 10' tall and very low precipitation area</p>	<p>c. and wc. CO; NM</p> 	<p>zone 3</p> <p>to -20°F in Denver</p>

<p><i>thompsoniae</i> 4" red-violet to blue-violet</p>	<p>May-June</p>	<p>small flower attractive shaped subshrub with many branches; flower stems prostrate or wand-like; palate (base of corolla) is yellow bearded; staminode bearded in orange to golden-yellow hairs</p> <p>gray-colored leaves spatulate or obvate; plant often forms mats</p> <p>trough or easily seen in raised rock garden cultivated in: WA, CO to NY</p>	<p>sandy-gravelly</p>	<p>dry</p>		<p>4900-9800' high deserts; subalpine slopes; white calerous clays or sandy soils in sagebrush and pinyon-juniper</p>	<p>CA, NV, UT, AZ</p> 	<p>zone 5 to -20°F in Denver</p>
<p><i>tusharensis</i> 5" x 16" wide blue to blue-violet</p>	<p>June-Aug</p>	<p>small flower beautiful leafy subshrub; flowering stems are erect and many-branched; likes protected side of a rock; attractive garden subject</p> <p>blue-gray, tiny round leaves; trough or smaller rock garden placed so easy to view cultivated in: offered for sale by a CO seed company suggests general interest in the species</p>	<p>sandy, gravelly</p>	<p>dry</p>		<p>7050-10,000 subalpine slopes, sandy or gravelly</p>	<p>c. UT</p> 	<p>zone 4</p>
<p><i>yampaensis</i> 2" lilac or blue-lavender</p>	<p>June</p>	<p>small flower heavenly blue flowers; closely related to <i>P. acaulis</i> but more robust and flowers slightly larger and more numerous; barely extend above the foliage</p> <p>tufts of linear (straight and narrowleaves) or slightly rounded leaves in dense clumps with no stem showing trough; easy to view site without competition of large plants nearby cultivated in: CO; offered for sale by a CO seed company suggests general interest in the species</p>	<p>sandy-gravelly</p>	<p>dry</p>		<p>6200' calcerous soils</p>	<p>Moffat Co, CO</p> 	<p>zone 4</p>

parenthesis—not reported in cultivation

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-%202034k>



Penstemon ramaleyi