

<i>Opuntia basilaris</i> varieties compared	Var. <i>basilaris</i> Utah specimens	Var. <i>longiareolata</i> other	Var. <i>longiareolata</i> Utah specimens	Var. <i>heilii</i> (occurs solely in Utah)
Joint shape	cordate to broadly obovate to obovate	narrowly obovate to clavate, almost elliptical, to broadly obovate to spathulate	obovate to spathulate	obovate, elliptical very slightly spathulate slightly cordate
size, length	9-12 cm	10-12 cm (Clover & Jotter)	9-19.5 cm	7-16 cm (mostly smaller sizes)
width	7.4-11 cm	4.5 cm (Clover & Jotter)	4.5-10 cm	4-9.5 cm
color	glaucous	Mature pale yellow-green, young pads deep blue-green (Clover & Jotter)	mature pads and herbarium specimens yellow-green	mature pads and herbarium specimens yellow-green
Areoles, number	9-11	(4)6-8(9)	6-9	4-6
size	2.5-3.5 mm	1 x 3 mm (Clover & Jotter)	2-2.5 x 3-3.5 mm	2.5 – 5 mm
distance	1-1.2 cm	(0.9) 1 (mostly 1.3)–2.4 cm (0.8-1 cm per Clover & Jotter)	0.9-1.25 cm	1-2.5 cm
shape	round	elongate (Clover & Jotter)	elongate or round	usually round, may be elongate
Glochids, length	3-4 mm		2.5-3 (6) mm	2-4 (8) mm
color	brown to red-brown	red-brown to tan-brown to light yellow	yellow brown to pale yellow brown	yellow
abundance	copious	Early deciduous (Clover & Jotter)	not as abundant	not as abundant
Papillae	yes, easily seen		dense to not evident; shorter	at 60x maybe some?
Altitude, meters	713-1150 m	(400m) 800m-1200m (1440m)	1130-1198 m	1426-1707 m
feet	2340-3775'	(1312') 2620-3936' (4720')	3706-3930' (expected higher on plateaus overlooking the CO river)	4680-5600'
Association, community	Mojave desert shrub <i>Yucca-Larrea</i> <i>Larrea-Acacia</i>	Desert shrub, pinyon-juniper	Blackbrush community, or unrecorded	Desert shrub or salt desert shrub
Assoc. plants			<i>Gutierrezia</i> , <i>Ephedra</i>	<i>Ephedra</i> , mat <i>Atriplex</i> , <i>Suaeda</i> , Shadscale, <i>Eriogonum</i>
Parent rock		Kaibab limestone, Zoroaster granite, Hakatai shale, Vishnu Schist, Tonto, Moenkopi shale, Navajo sandstone and others	Morrison, Hermosa	Mancos, Moenkopi, Entrada, Tununk, Ferron, Curtis
soil	sandy, gravelly or rocky	Sand/sand dunes/sandy beaches/rocky slopes	Sand/sandy beaches/rocky slopes	sand, clay, or with gravel
Date of anthesis	mid-April to mid-May	Late March-April (May)	Early to mid-May	Early to mid-May
Ovary height	2.2-5 cm		1.6-2.1 cm	1.5-2 cm
Ovary width	2-2.2 cm		1.8-2.1 cm	1.5-3 cm
Petaloid height	3-4.6 cm		1.6-4.1 cm	2.4-3.5 cm
Flower height	5.2-9.6 cm		4.6-5.1 cm	4.1-7.5 cm
Counties in Utah	Washington (confused with <i>O. aurea</i> in Zion National Park)	(in AZ: Coconino, Mohave, Navajo)	Garfield, San Juan	Emery, Wayne