

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PDCAC060J0

**Data Sensitivity:** Yes

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Echinocereus rigidissimus*  
**COMMON NAME:** Arizona Rainbow Hedgehog Cactus  
**SYNONYMS:** *Cereus pectinatus* var. *rigidissimus* (basionym), *Echinocereus pectinatus* var. *rigidissimus*, *Echinocereus dasyacanthus* var. *rigidissimus*  
**FAMILY:** Cactaceae

**AUTHOR, PLACE OF PUBLICATION:** Haage, Ferdinand. Special Preisverz. 13. 1897.

**TYPE LOCALITY:** Mexico: Sierra del Pajarito, 900-1400m

**TYPE SPECIMEN:** MO 148035 (Lectotype of *Echinocereus pectinatus* var. *rigidissimus*). Schott, #s.n. 1855.

**TAXONOMIC UNIQUENESS:** NatureServe (2015) lists 23 species, another 43 subspecies or varieties, and one named hybrid of *Echinocereus*. Twelve species are found in Arizona, as are 17 of the varieties or subspecies (one). Three of the species are only found within the State.

**DESCRIPTION:** *Echinocereus rigidissimus* var. *rigidissimus*: **Plants** unbranched (very rarely few branched). **Stems** erect, short cylindric, 6-18(-30) × 9-11 cm; ribs (15-)18-23(-26), crests slightly undulate; areoles 3-5 mm apart. **Spines** 15-23 per areole, all radial, straight or slightly curved toward stem, tightly appressed, pectinately arranged, bright pink or pink-and-white in alternating bands of color around stem, 6-10 mm. **Flowers** 6-8 × 6-9 cm; flower tube to 30 × 15-45 mm; flower tube hairs to 2 mm; inner tepals bright rose-pink or magenta, conspicuously white banded proximally, 40-50 × 10-15 mm, tips relatively thin, delicate; anthers yellow nectar chamber 3-5 mm. **Fruits** greenish or dark purplish brownish, 2.5-5 cm, pulp white. **2n** = 22.

*Echinocereus rigidissimus*, lacking central spines, belongs to the *E. reichenbachii* group, unrelated to the superficially similar *E. pectinatus* group, which has at least microscopically visible stubs of central spines. It sometimes occurs with *E. pseudopectinatus* but without evidence of hybridization. The reported habitat preference for limestone (L. D. Benson 1969) is erroneous; this species is a calcifuge, preferring soils poor in lime and usually acid. (Flora of North America 2015).

**AIDS TO IDENTIFICATION:** Benson (1981) notes the following characteristics he used to distinguish *rigidissimus* from other varieties of *Echinocereus pectinatus*:

Central spines: None

Radial Spines: 18-22, white and red in alternating horizontal color bands on the stem, obviously pectinate.

**ILLUSTRATIONS:**

Photos: <http://swbiodiversity.org/seinet/taxa/index.php?taxon=Echinocereus%20rigidissimus>.

Photos and Herbarium Mounts: <http://eol.org/pages/486523/media>.

Photos:

[http://www.ilifl.com/Encyclopedia/CACTI/Family/Cactaceae/8509/Echinocereus\\_rigidissimus](http://www.ilifl.com/Encyclopedia/CACTI/Family/Cactaceae/8509/Echinocereus_rigidissimus).

**TOTAL RANGE:** Arizona, New Mexico; Mexico (Sonora and Chihuahua).

**RANGE WITHIN ARIZONA:** Southeastern Arizona from just west of Tucson east to New Mexico, and south to the Mexico border. Includes Pima, Santa Cruz and Cochise Counties.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial succulent.

**PHENOLOGY:** Flowering late spring-summer (May-July); fruiting 3 months after flowering.

**BIOLOGY:** *E. rigidissimus* is fire adapted (Breslin et al 2015).

**HABITAT:** Gravelly hills, steep canyon sides, semi-desert grasslands, oak woodlands, interior chaparral, igneous substrates.

**ELEVATION:** 4000 – 5250 feet (1200-1600m).

**EXPOSURE:** Not specified.

**SUBSTRATE:** Igneous.

**PLANT COMMUNITY:** Semi-desert grasslands, Oak woodlands, interior Chaparral.

**POPULATION HISTORY AND TRENDS:** The species is considered abundant in southeast Arizona (Breslin et al 2015).

**SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None.  
**STATE STATUS:** Salvage Restricted (ARS ANPL 1991)  
**OTHER STATUS:** "Least Concern" (IUCN RedList 2013)

**MANAGEMENT FACTORS:** None specified. It is notable that the species is reported as fire adapted.

**PROTECTIVE MEASURES TAKEN:** Listed as a Salvage Restricted species under Arizona Native Plant Law and as a species of Least Concern by IUCN.

**SUGGESTED PROJECTS:** None.

**LAND MANAGEMENT/OWNERSHIP:**

**SOURCES OF FURTHER INFORMATION****REFERENCES:**

- Benson, Lyman. 1981. The Cacti of Arizona. 3rd edition. University of Arizona Press, Tucson, AZ. pp. 146.
- Breslin, Peter, Rob Romero, Greg Starr, Vonn Watkins, et al. 2015. Field Guide to Cacti and other Succulents of Arizona. Tucson Cactus and Succulent Society, Tucson, Arizona. pp. 302.
- Flora of North America (eFloras.org), accessed 12/10/2015, [http://www.efloras.org/florataxon.aspx?flora\\_id=1&taxon\\_id=242415263](http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242415263).
- IUCN RedList, accessed 12/03/2015, <http://www.iucnredlist.org/details/152184/0>.
- Global Plants, accessed 12/10/2015, <http://plants.jstor.org/stable/10.5555/al.ap.specimen.mo-148035>.
- NatureServe Explorer, accessed 12/03/2015, <http://explorer.natureserve.org/index.htm>.
- Tropicos, accessed 12/10/2015, <http://www.tropicos.org/Name/5103898>.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

**ADDITIONAL INFORMATION:**

**Revised:** 2015-12-10 (BDT)

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