

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

**Plant Abstract**

**Element Code:** PDR0S0H1L0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Crataegus erythropoda*  
**COMMON NAME:** Cerro Hawthorne  
**SYNONYMS:** *Crataegus cerronis*  
**FAMILY:** Rosaceae

**AUTHOR, PLACE OF PUBLICATION:** Ashe, William Willard. Bull. North Carolina  
Exp. Sta. 175: 113. 1900.

**TYPE LOCALITY:** Colorado: Cerro Summit, Gunnison Watershed

**TYPE SPECIMEN:** RM 3703 (isotype? of *C. cerronis*). C.F. Baker, #57. June 7, 1901.

**TAXONOMIC UNIQUENESS:** The *Crataegus* genus are the hawthorns, and by some accounts includes well over 100 species. Arizona has two species: *C. erythropoda* and *C. rivularis*.

**DESCRIPTION:** Shrubs or trees, 50 dm. Stems: twigs: new growth greenish, glabrous, 1-year old dark reddish mahogany; bark on younger 2–5 cm thick branches dark gray-brown, sometimes copper-colored; thorns on twigs straight or slightly recurved, 2-years old black, shiny, moderately stout, 2–4 cm. Leaves: petiole 1–2 cm; blade rhombic-elliptic, 3–5 cm, <length 1.6 times width>, ± coriaceous-shining, base cuneate, lobes 3 or 4 per side, lobe apex acute, margins serrate, teeth very short, venation craspedodromous, veins 4 or 5 per side, apex acute, abaxial surface glabrate, adaxial sparsely pilose young. Inflorescences 5–10-flowered; branches glandular-punctate; bracteoles few to absent, margins sessile-glandular. Flowers 14–18 mm diam.; sepals narrowly triangular, 3–4 mm, margins glandular-serrate, teeth small, apex acute, glabrous; stamens 10, anthers pink-purple to purple; styles 4 or 5. Pomes deep red to vinous purple mature, orbicular, 10 mm diam.; sepals reflexed, 4 mm; pyrenes 3–5, sides excavated (Flora of North America 2016).

**AIDS TO IDENTIFICATION:** A native shrub or small tree that grows to sixteen feet high, with dense spreading, glabrous branchlets and sharply thorny. Leaves are broadest near the base or middle, dark green, smooth at maturity, and sometimes shallowly lobed. Flowers are white and produced in clusters of five to ten flowers. Fruits are elongated, red to blackish in color (USDA NCRS, no date).

From Kearney and Peebles (1951):

Spines few, not more than 2.5 cm long; leaves elliptic, about twice as long as wide, not or scarcely lobed, tapering at base.....*C. rivularis*  
 Spines numerous, 3 to 5 cm long; leaves ovate, less than twice as long as wide, often distinctly lobed, rather abruptly contracted at base.....*C. erythropoda*

**ILLUSTRATIONS:**

Photos and Herbarium Mounts:

<http://swbiodiversity.org/seinet/taxa/index.php?taxon=Crataegus%20erythropoda>.

Photos: <http://eol.org/pages/2506910/media>.

Line Drawing: [https://www.researchgate.net/figure/237166345\\_fig6\\_Fig-6-Line-drawing-of-Crataegus-erythropoda-a-fruit-and-nutlets-b-fruit](https://www.researchgate.net/figure/237166345_fig6_Fig-6-Line-drawing-of-Crataegus-erythropoda-a-fruit-and-nutlets-b-fruit).

**TOTAL RANGE:** Colorado, Wyoming, New Mexico, Utah and Arizona.

**RANGE WITHIN ARIZONA:** From the SW Santa Maria Mountains in Yavapai County to the Oak Creek Canyon locality in Coconino County and the Carrizo/Cibique Ridge area of Navajo County. Kearney and Peebles (1951) also state that the Oak Creek Canyon specimens seem to approach *C. wootoniana*, and that the species extends to near Calva in Graham County.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial shrub or small tree.

**PHENOLOGY:** Flowering: May-June. Fruiting: Sept to Oct.

**BIOLOGY:**

**HABITAT:** Sagebrush, pastures, usually along streams.

**ELEVATION:** Range-wide 5575 – 8530 feet (1700-2600m), per Flora of North America. Arizona collections have been made from 4960 – 6600 feet (1510-2010m).

**EXPOSURE:** Will succeed in partial shade and different soil types, it grows best in full sunlight and well-drained loamy soils.

**SUBSTRATE:** Does best in well drained, loamy soils; will tolerate wet soils.

**PLANT COMMUNITY:** Riparian communities along streams in Canyons (Kearney and Peebles 1951).

**POPULATION HISTORY AND TRENDS:** Unknown for Arizona. There are six or seven occurrences in the State, and perhaps another record from Graham County. The

collections do not provide much information on actual populations or trends. NatureServe considers the species to be critically imperiled.

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None.  
**STATE STATUS:** None.  
**OTHER STATUS:** None.

**MANAGEMENT FACTORS:** The NCRS Plant Guide (no date) provides the following information for this species:

### **Uses:**

Erosion Control: Because cerro hawthorn tolerates a wide variety of sites, it can be planted to stabilize banks, for shelterbelts, and from wind and water erosion.

Timber: Although the wood is hard and strong, it has no commercial value except for tool handles and other small items.

Wildlife: It provides excellent cover and nesting sites for many smaller birds. Birds, rodents, and other smaller mammals eat the small fruits.

Beautification: Excellent for environmental plantings including small specimen tree and shrub border.

### **Establishment:**

Propagation from Seed or Grafting: Cerro hawthorn can be propagated by either seeds or grafting. Successful propagation using seeds requires acid scarification followed by warm stratification and prechilling. Seeds, whose numbers per lb. varies with species, are planted early in the fall, in drill rows eight to twelve inches apart and covered with 1/4 inch of soil. Seedlings must not be kept in the nursery longer than a year.

### **Management:**

Pruning should be done in the winter or early spring in order to maintain a clear shoot leader on young trees and/or remove the weakest branches to allow more light to pass through. Suckers or stems arising from the roots should be removed when they become noticeable.

### **Pests and Potential Problems:**

Although insects and diseases seldom affect cerro hawthorn, it is susceptible to fireblight, cedar-hawthorn rust, cedar-quince rust, leaf blight, fruit rot, and leaf spot.

It is wind tolerant, making it a good tree species in shelterbelt planting. It is also tolerant of atmospheric pollution and performs well in urban settings.

**PROTECTIVE MEASURES TAKEN:** None specified.

**SUGGESTED PROJECTS:** None.

**LAND MANAGEMENT/OWNERSHIP:** USDA Forest Service (both Coconino and Prescott National Forests); USDI Bureau of Indian Affairs (Fort Apache Indian Reservation) and a private land holding.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

- American Forests, accessed 6/28/2016, <http://www.americanforests.org/bigtree/cerro-hawthorn-crataegus-erythropoda-3/>.
- Cockerell, T.D.A. (1907). The genus *Crataegus* in Colorado. University of Colorado Studies 5:41–45.
- Flora of North America (eFloras.org), accessed 6/27/2016, [http://www.efloras.org/florataxon.aspx?flora\\_id=1&taxon\\_id=250100091](http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250100091).
- JStor| Global Plants, accessed 6/27/2016, <http://plants.jstor.org/search?plantName=%22Crataegus+erythropoda%22&syn=1>.
- Kearney, Thomas H. and Robery H. Peebles. 1951, with supplement 1960. Arizona Flora. University of California Press, Berkeley, CA. p. 378.
- Tropicos, accessed 6/27/2016, <http://www.tropicos.org/Name/27801518>.
- USDA NRCS National Plant Data Center, accessed 6/27/2016, [www.npdc.usda.gov](http://www.npdc.usda.gov). Plant Guide: Cerro Hawthorne, *Crataegus erythropoda*, prepared by Alfredo B. Lorenzo.

### **MAJOR KNOWLEDGEABLE INDIVIDUALS:**

**ADDITIONAL INFORMATION:** The specific epithet alludes to the pedicels, which may turn red in the fall or under particularly dry conditions, which is neither constant in nor unique to *C. erythropoda* (Flora of North America 2016).

The largest known tree of this species was recorded from Arizona, Coconino National Forest in 2007. It measured 15 feet in height, and had a crown spread of 16 feet (American Forests, no date).

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