

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

**Plant Abstract**

**Element Code:** PDR0S1K3Y0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Rubus leucodermis*  
**COMMON NAME:** Western Raspberry, Western Black Raspberry  
**SYNONYMS:** *Melanobatus leucodermis*, *Rubus occidentalis* subsp. *leucodermis*  
**FAMILY:** Rosaceae

**AUTHOR, PLACE OF PUBLICATION:** Douglas, David. A Flora of North America, containing... 1(3): 454. 1840.

**TYPE LOCALITY:** Oregon R., rocks.

**TYPE SPECIMEN:** NYBG: NY 429566 (Type?). T Nuttall (#s.n.). No date.

**TAXONOMIC UNIQUENESS:** The Rosaceae or Rose family has about 100 genera and 3000 species worldwide, mostly in temperate and subtropical regions of the northern hemisphere. Many genera are cultivated for fruit (*Fragaria*, *Prunus*, *Rubus*) and others as ornamentals (*Pyracantha*, *Rosa*), Brasher 2001. NatureServe lists over 250 species and varieties of *Rubus* in the United States and Canada.

There are six species of *Rubus* in Arizona: *parviflorus*, *neomexicanus*, *discolor*, *arizonensis*, *leucodermis* and *idaeus*.

**DESCRIPTION:** Shrubs, 10–30 dm, armed. Stems <biennial>, ascending, often arching, glabrous or sparsely puberulent, eglandular or sparsely to densely short-stipitate-glandular, strongly pruinose; prickles moderate to dense, erect or curved, slender to stout, 4–8 mm, usually broad-based, sometimes narrow-based. Leaves deciduous, palmately compound or ternate; stipules filiform, 5–10 mm; <petiole with hooked or erect prickles, glabrous, eglandular or sparsely to densely sessile- to short-stipitate-glandular; lateral leaflets stalked, at least 2 larger ones, often with prickles, glabrous, eglandular or stipitate-glandular>; leaflets 3–5(–7), terminal ovate to lanceolate, 6–10 × 3–6 cm, base cordate to truncate, unlobed or shallowly 3-lobed, margins serrate to doubly serrate, apex acuminate, abaxial surface sometimes with prickles on midrib and some lateral veins, glabrous to strongly white-tomentose, usually eglandular. Inflorescences axillary and terminal, (1–)3–10(–12)-flowered, flat-topped cymiform or umbelliform. Pedicels: prickles sparse to dense, hooked or erect, puberulent, eglandular or sparsely to densely sessile- or short-stipitate-glandular. Flowers bisexual; petals <erect, then ascending>, white, oblong to oblanceolate, 3–6(–8) mm; filaments laminar; ovaries pubescent, rarely glabrous. Fruits reddish purple to nearly black,

depressed globose to conic, 1–2 cm; drupelets 20–60, coherent, separating from torus. (Flora of North America 2015.)

**AIDS TO IDENTIFICATION:** *Rubus* is distinguished from other genera by its fruit, which is a raspberry-like aggregate of drupelets.

*R. parviflorus* and *R. neomexicanus* are unarmed plants with simple leaves. The remaining four species are conspicuously armed and have compound leaves. *R. discolor* has either simple or compound cymes, with 11-numerous flowers terminating the floricane; hairs stellate. The remaining three species have simple cymes, 1-8 flowered and simple hairs. *R. arizonensis* has leaflets that are green both above and below and procumbent, vine-like canes. Both *R. leucodermis* and *idaeus* have leaflets that are green above and gray-white below, and canes that are erect, arched or sprawling. *Rubus leucodermis* has an unarmed calyx, prickles on leaves and inflorescences stout, broad-based, laterally compressed and strongly recurved, mature fruit dark red to nearly black and floricane leaves 3-foliolate (Brasher 2001).

*Rubus leucodermis* is similar to *R. occidentalis* [not occurring in Arizona], differing primarily by its leaflets having acuminate apices and lateral leaflets that are distinctly stalked. Prickles on the pedicels of *R. occidentalis* are erect; those of *R. leucodermis* tend to be hooked. (Flora of North America 2015.)

#### **ILLUSTRATIONS:**

Photos and Herbarium Mount:

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

**TOTAL RANGE:** New Mexico to California and north to Montana, British Columbia and Alaska (excluding Colorado and Wyoming), NatureServe 2015.

**RANGE WITHIN ARIZONA:** Central-western Mohave County; Coconino County around Flagstaff and Oak Creek Canyon, the extreme northeast corner, and southern most extent along the Mogollon Rim boundary with Gila County; northwest and central Gila County

#### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial shrub; with canes arched or sometimes sprawling.

**PHENOLOGY:** Flowering: May and June. Arizona collections records report flowers from mid-May to mid-June, and fruits from mid-June to mid-August. Collections from mid-August into September report no fruits.

**BIOLOGY:**

**HABITAT:** Usually riparian or wet areas in pine or mixed conifer forests.

**ELEVATION:** 5900 – 8035 feet (1800-2450m), Brasher 2001. A 2010 Arizona collection in western Mohave County extends the published lower elevation range to 3580 feet (1090m).

**EXPOSURE:** Not specified.

**SUBSTRATE:** Preference for moist to wet spring and riparian settings, but has also been found in gravelly soils and rocky sandy soils on granite and sandstone substrates.

**PLANT COMMUNITY:** Ponderosa pine and mixed conifer communities; also riparian and spring settings. Associated species include: *Pinus ponderosa*, *Alnus oblongifolia*, *Lupinus latifolius*, *Quercus gambelii*, *Juglans major*, *Pseudotsuga menziesii*, *Rubus neomexicanus*, *Abies concolor*, *Fraxinus anomala*, *Rhus aromatica* var. *trolibata*, *Holodiscus dumosus*, *Quercus chrysolepis*, *Cercocarpus montana*, *Ceanothus integerrimus*, *Fendlera rupicola*, *Amelanchier utahensis*, *Juniperus osteosperma*, *Artemisia*, *Yucca*, *Gutierrezia sarothrae*, *Heterotheca*, *Agrostis viridis*, *Cicuta maculate*, *Garrya wrightii*, *Geranium caespitosum*, *Juniperus deppeana*, *Pteridium aquilinum*, *Quercus grisea*, *Robinian neomexicana*, *Rosa woodsii*, *Acer grandidentatum*, *Salix lasiolepis*, *Arctostaphylus*, *Penstemon*, *Cirsium*, *Hedeoma*.

**POPULATION HISTORY AND TRENDS:** Unknown for Arizona. The 1987 review by NatureServe considered the species to be almost critically imperiled in the State. At the time, there were few known occurrences. Currently, there are 15 element occurrences suggesting a fairly wide distribution, including a collection much lower than elevations noted in the literature and another in a cool desert setting near the Utah border. Only one collection indicated that the plant was “common and abundant.” Most noted the plant was infrequent, occasional or scattered. The fact that some of these sites were in riparian settings could suggest that the species might have a wider than previously known distribution, but might not be very common wherever it occurs. At a few sites, the species was collected over a 30 year time frame. Based on this information, the most recent rank calculation indicates the species is vulnerable, rather than imperiled, in Arizona.

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None.

**STATE STATUS:** None.

**OTHER STATUS:** None.

**MANAGEMENT FACTORS:** None specified.

**PROTECTIVE MEASURES TAKEN:** None specified. Almost all of the collections are from Forest Service lands. This offers some level of protection, although the species is not listed as Forest Service Sensitive.

**SUGGESTED PROJECTS:** None.

**LAND MANAGEMENT/OWNERSHIP:** The majority of known collection sites occur equally on the U.S. Forest Service Coconino and Tonto National Forests. Other sites (one each) are found on Mohave County Park land, the USDI BIA Navajo Nation, and a private land holding.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

- Brasher, Jeffrey. 2001. Rosaceae Rose Family, Part One: Rubus L. Raspberries, Blackberries, Thimbleberries. Jour. Ariz. Nev. Acad. Sci. 33(1): 50-57.
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### **MAJOR KNOWLEDGEABLE INDIVIDUALS:**

### **ADDITIONAL INFORMATION:**

**Revised:** 2015-07-10 BDT  
2016-11-21 BDT

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