

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

**Plant Abstract**

**Element Code:** PDAPI05020

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Spermolepis gigantea* (J.M. Coulter and Rose)  
**COMMON NAME:** Sand parsley, Western sand parsley, Desert sand-parsley  
**SYNONYMS:** *Ammoselinum occidentale*, *Apium popei* Gray, *Ammoselinum giganteum*  
**FAMILY:** Apiaceae (=Umbelliferae)

**AUTHOR, PLACE OF PUBLICATION:** J.M. Coulter and Rose, Contributions from the U.S. National Herbarium. 7(1): 89. 1900.

**TYPE LOCALITY:** Phoenix, Maricopa County, Arizona, United States of America.

**TYPE SPECIMEN:** HT: GH-73911. C.G. Pringle 28, 17 Jun 1882. Type material deposited at NYBG 405695 and USNM 127179.

**TAXONOMIC UNIQUENESS:** The species *gigantea* is one of eleven in the genus *Spermolepis*. The genus is comprised of 9 species native to North America, one species endemic to the Hawaiian Islands, and one species endemic to Argentina (Nesom 2012). The genera *Apiastrum*, *Ammoselinum*, and *Spermolepis* are in tribe Selineae and quite similar (Downie et al. 2010).

**DESCRIPTION:** Herbaceous annual. Stems 8-26 cm, simple or branching from base. Leaves oval to obovate, widest toward the tip, 1.5-2.5 cm long and 2.0-3.0 cm wide, divided into 3 main lobes. These are divided again into narrow lobes 4-13 mm long, 1 mm wide, glabrous or roughened. Umbels terminal and axillary; peduncles 2-5.5 cm, penultimate umbel sometimes sessile. Fruiting rays 4-10, unequal, spreading. Umbellets 1-10 flowered. Corolla is white to greenish yellow. Schizocarp fruits narrowly elliptic-ovate to ovoid-oblong, 3-4 mm, ribs low-rounded, hispid-hirsutulous on ribs and intervals. Dorsal ribs, 3, cordlike and thickened, lateral ribs, flattened and broad (Nesom 2012).

**AIDS TO IDENTIFICATION:** Species without expanded lateral ribs and with hairs or tubercles on both ribs and intervals of the schizocarp are in the genus *Spermolepis*, while those with expanded lateral ribs and scabrous-ribbed but otherwise glabrous mericarps are in the genus *Ammoselinum*. *S. gigantea* and *S. castellanosii* can be distinguished within the genus by their relatively elongate fruits. *S. gigantea* is “unique in its hispid-hirsutulous fruit vestiture with long, sharp-pointed hairs without tuberculate bases” (Nesom 2012).

**ILLUSTRATIONS:**

Color Photo of Specimen (Figure 18, Nesom 2012)

Color Photo of Isotype (Figure 19, Nesom 2012)

Color Photo of Schizocarp (Figure 1u, Nesom 2012)

**TOTAL RANGE:** Southern California to southern Arizona, south into Coahuila, Mexico (Nesom 2012, NatureServe 2022).

**RANGE WITHIN ARIZONA:** Maricopa, Pima, and Pinal counties. Found near Eloy and Casa Grande in the early to mid-1900s.

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

**GROWTH FORM:** Herbaceous annual. Chromosome number appears to be  $x = 11$  (Nesom 2012).

**PHENOLOGY:** Flowers March to April.

**BIOLOGY:** Faintly Pastinaca-scented based on chromosome vouchers cultivated in UC Botanical Garden (Sally McKay, 1965, C-755). The eatable sweetish roots have a strong, anise like flavor.

**HABITAT:** Lower Sonoran Zone on desert mesas and in flat basins (NatureServe 2022).

**ELEVATION:** 1,400-2,500 ft (427-763 m) in Arizona, and around 1,312 ft (400 m) in California.

**EXPOSURE:** Open to heavy soils under shrubs.

**SUBSTRATE:**

**PLANT COMMUNITY:** Lower Sonoran Zone in Creosote Bush Scrub.

**POPULATION TRENDS:** Unknown

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None

**STATE STATUS:** None

**OTHER STATUS:** None

**MANAGEMENT FACTORS:**

**CONSERVATION MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Surveys to determine the status, range and life history of this plant are needed.

**LAND MANAGEMENT/OWNERSHIP:** BLM – Tucson Field Office; USFS – Tonto National Forest; State Land Department; Private.

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

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**MAJOR KNOWLEDGEABLE INDIVIDUALS:****ADDITIONAL INFORMATION:**

**Revised:** 1992-12-08 (DBI)  
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