

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDAST5103E

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Hymenopappus filifolius* var. *cinereus*
COMMON NAME: Fineleaf Woolly-white, Common Hyalineherb
SYNONYMS: *Hymenopappus cinereus*
FAMILY: Asteraceae

AUTHOR, PLACE OF PUBLICATION: Johnston, Ivan Murray. Contrib. Gray Herb.
Harvard Univ. 68: 98. 1923.

TYPE LOCALITY: Colorado: Durango

TYPE SPECIMEN: RM 1176 (paratype of *Hymenopappus cinereus*). CF Baker, FS Earle and SM Tracy, #1028. July 20, 1898.

TAXONOMIC UNIQUENESS: The genus *Hymenopappus* has 10 species with 18 varieties in North America. Arizona has five species and six of the varieties. Notably, the species *filifolius* has 12 of the 18 varieties, five of these, including *cinereus*, are found in the State (NatureServe 2015).

According to Welsh (1993), *H. filifolius*, is a polymorphic species which consists of a series of geographic and/or edaphically correlated intraspecific taxa that at times intergrade.

Regarding *H.f.* var. *cinereus*, Welsh 1993 further states that he has interpreted this variety to include three largely sympatric phases that were treated as varieties by Turner 1956. Although there is a tendency for these phases to be geographically correlated, they are also connected completely by a series of intermediates and can only be arbitrarily segregated.

DESCRIPTION: **Stems** 15-40 cm. **Leaves:** basal axils ± densely tomentose, terminal lobes 2-8(-15) mm; cauline (0-)2-4. **Heads** 1-6. **Peduncles** 1-6 cm. **Phyllaries** 6-9 mm. **Florets** 25-40; corollas yellowish or whitish, 3-4.5 mm, throats 1.5-2.5 mm, lengths 2.5-4 times lobes; anthers 2-3 mm. **Cypselae** 4-6 mm, hairs 1-3 mm; **pappi** 1.5-2 mm (Flora of N America 2015)

AIDS TO IDENTIFICATION: The following key from the Flora of North America (2015) by John L. Strother (adapted from B.L. Turner 1956) can be used to separate the species *filifolius* from the other *Hymenopappus* species:

1. Perennials (usually 3+ aerial stems from crown); cauline leaves mostly 0–12; heads 1–20(–50) per stem; disc corolla throat lengths 2–8 times lobes.....2
- 1' Biennials (usually 1 stem from crown); cauline leaves (2–)10–100; heads (15–)20–200 per stem; disc corolla throat lengths 1–2(–3) times lobes.....5
2. Ray florets 8.....3
- 2' Ray florets 0.....4
4. Leaf blades simple or 1-pinnate; cypselae glabrous or sparsely hirtellous...*H. mexicanus*
- 4' Leaf blades 2-pinnate; cypselae hirtellous to villous.....*H. filifolius*

Some distinguishing characteristics of the variety *cinereus* are yellow flowers, achene hairs 1-2 mm long, leaves cauline and basal, and plants of the Colorado drainage system (Welsh 1993).

ILLUSTRATIONS:

Herbarium Mounts:

<http://swbiodiversity.org/seinet/taxa/index.php?taxon=Hymenopappus%20filifolius%20var.%20cinereus>.

Photos: http://www.nps.gov/arch/learn/nature/asteraceae_hymenopappus_filifolius.htm.

TOTAL RANGE: The Four Corner States (Arizona, New Mexico, Colorado and Utah), and east to Oklahoma and Texas (NatureServe 2015).

RANGE WITHIN ARIZONA: Widely distributed throughout northern Arizona, including some outlier sites. North of the Colorado River from the Arizona Strip, Kaibab Plateau to the Paria Plateau, east to the Shonto Plateau, Skeleton Mesa and Red Rock Valley, and south to the Mogollon Rim and the Alpine Divide. Mohave, Coconino, Navajo and Apache Counties.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial forb.

PHENOLOGY: Flowering: May-September (Flora of N. America 2015). This corresponds with collections made in Arizona.

BIOLOGY:

HABITAT: Open areas. Blackbrush, warm desert shrub, salt desert, sand sagebrush-ephedra, pinyon-juniper and ponderosa pine communities.

ELEVATION: 5575 – 9840 feet (1700-3000m), Flora of N. America 2015. Two Arizona collections from the Arizona Strip were made at elevations of 4300 feet (1310m).

EXPOSURE: Although the variety tends to prefer open aspects, it has been collected from a west-facing canyon, a steep east-facing slope, and on the sides of a shaded cliff.

SUBSTRATE: Sandy soils seem to be preferred, and some are reported as deep sandy soils. One collection noted a limestone rubble-loam soil.

PLANT COMMUNITY: Blackbrush, warm desert shrub, salt desert, sand sagebrush-ephedra, pinyon-juniper and ponderosa pine communities. Associated species: *Artemisia filifolia*, *Phlox* sp., *Stephanomeria exigua*, *Pinus edulis*, *Juniperus osteosperma*, *Erigeron utahensis*, *Ranunculus testiculatus*, *Coleogyne ramosissima*, *Quercus turbinella*, *Cercocarpus intricatus*, *Ephedra viridis*, *Glossopetalum spinosa*, *Thelypodium wrightii*, *Carex aurea*, *Calamagrostis scopulorum*, *Adiantum capillus-veneris*, *Tamarix chinensis*, *Sonchus*, *Typha*, *Bouteloua gracilis*, *Artemisia tridentata*, *Hymenoxys acaulis*, *Astragalus calycosus*, *Abronia nana*, *Chaetopappa ericoides*, *Townsendia incana*, *Amelanchier utahensis*, *Dactylis glomerata*, *Agropyron cristatum*, *Physaria intermedia*, *Sphaeralcea parvifolia*, *Astragalus* sp., *Achnatherum hymenoides*, *Comandra umbellata* spp. *pallida*, *Eriogonum leptoclaydon* var. *ramosissimum*, *E. corybosum* var. *glutinosum*, *Gutierrezia*, *Oryzopsis hymenoides*, *Yucca augustissima*, *Poliomintha incana*, *Ericameria nauseosa*, *Juniperus scopulorum*, *Yucca baileyi*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. There are 21 known collections in the State, widely scattered throughout the northern half. A few of these are historical, dating as far back as 1935. More than half, however, are from the last 15 years. Since extremely few of these are repeat collections at the same site, and almost none include abundance data, neither population densities nor trends can be inferred. The variety does not appear to be in any jeopardy, and the “imperiled” designation by NatureServe may be excessive. This variety is also widely distributed in the Four Corners states.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.

STATE STATUS: None.

OTHER STATUS: None.

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None.

SUGGESTED PROJECTS: None.

LAND MANAGEMENT/OWNERSHIP: U.S.D.I. Bureau of Land Management (both Arizona Strip and Kingman Field Offices); Bureau of Indian Affairs (both Navajo Nation and Kaibab-Paiute Reservation); National Park Service (Grand Canyon NP, Lake Mead NRA, and

Pipe Springs NM); U.S.D.A. Forest Service (Coconino, Kaibab and Apache-Sitgreaves National Forests); Arizona State Trust Land; and a private holding.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Flora of North America, eFloras.org, accessed 9/11/2015, http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250066975.
- JStor| Global Plants, accessed 9/11/2015, <http://plants.jstor.org/stable/10.5555/al.ap.specimen.rm0001176>.
- NatureServe Explorer, an Online Encyclopedia of Life, accessed 9/11/2015, <http://explorer.natureserve.org/>.
- Tropicos, accessed 9/11/2015, <http://www.tropicos.org/Name/2710532>.
- Turner, B. L. 1956. A cytotaxonomic study of the genus *Hymenopappus* (Compositae). *Rhodora* 58: 163–186, 208–242, 259–269, 295–308.
- Vestal, Paul A. 1952. The Ethnobotany of the Ramah Navaho. Papers of the Peabody Museum of American Archaeology and Ethnology 40(4):1-94 (p. 52).
- Welsh, Stanley L., N, Duane Atwood, Sherel Goodrich, and Larry Higgins, eds. 1993. A Utah Flora. 2nd edition, revised. Brigham Young University, Provo, UT. p. 231.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION: According to Vestal (1952), a decoction of the plant was taken for a cough, and a cold infusion of the root was used as a “life medicine” by the Navajo.

Revised: 2015-09-11 (BDT)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.