Element Code: PDAST530E0 Added to List 2.2 on 2008-11-20

Rare Plant Status Review: *Hymenoxys odorata*New Add to List 2.2

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) October 14, 2008

Background

Hymenoxys odorata is an annual herb in the Asteraceae. *H. odorata* has long been recognized as native to California and is included as in Munz's *A Flora of California* (1959), *The Jepson Manual* (1993), *The Jepson Desert Manual* (2003), *The Flora of North America* (Vol. 21), and will be included in *The Jepson Manual* (2nd edition) (M. Bierner, pers. comm. 2008). *H. odorata is* distinguished from other *Hymenoxys* taxa of California's deserts based on its annual growth habit, and leaf (*H. odorata* has "leaves 1-2 pinnately divided into linear lobes") and inflorescence characteristics. It typically flowers between April and June, but flowering individuals may be present as early as February, and as late as August-November in some years.

In California, *H. odorata* is known from sandy areas in desert riparian scrub, and Sonoran desert scrub habitats from 45 to 150 meters in elevation. Mark Bierner's draft Jepson Manual (2nd edition) treatment for *H. odorata* reports its habitat as, "roadsides, open flats, mesquite and creosote flats, ditches and drainages, stream banks and bottoms."

In California, *H. odorata* is known from approximately 8 occurrences in Imperial, Riverside, and San Bernardino counties. Occurrences are known from the Colorado Desert near the California-Arizona border in the Palo Verde Valley, in the vicinity of Blythe, and north of Cross Roads. *H. odorata* is also known from the states of Arizona, Colorado, Kansas, New Mexico, Oklahoma, and Texas and from Baja California, and northern Mexico. It is ranked as G5 (Secure) by NatureServe, and is unranked in all states, except Kansas, where it is considered a S2 (Imperiled) taxon. All occurrences of *H. odorata* in California are known solely from historical herbarium collections that are now 59 to 104 years old. Suitable habitat within and beyond the known range of *H. odorata* in California should be searched for additional occurrences.

Since herbarium specimens are the main source of location information for all of the known occurrences, some sites are vague. More detailed location information for some occurrences is needed to correctly map *H. odorata*. Little information is currently available about the population size of *H. odorata* at most of the known occurrences.

According to Jim Andre (pers. comm. 2008), occurrences of *H. odorata* in California are threatened by development and agriculture. Field work is needed to determine the status, and continued existence of *H. odorata* at all known occurrences.

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Based on the available information, CNPS and CNDDB recommend that *H. odorata* be added to List 2.2.

Recommended Actions

CNPS: Add to CNPS List 2.2

CNDDB: Add to CNDDB as G5 / S2

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Hymenoxys odorata DC. bitter hymenoxys Asteraceae

List 2.2

Imperial, San Bernardino, Riverside; Arizona, Baja California, Colorado, New Mexico, Texas

Cibola (040C) 3311436, Cross Roads (094B) 3411422, Palo Verde (040B) 3311446, Gene Wash (120C) 3411432

riparian scrub, Sonoran desert scrub / sandy; elevation 45-150 meters.

Annual herb. Blooms (February) April-June (August-November).

Known in California from fewer than ten occurrences. Threatened by agriculture and development.