

Hall's Harmonia

(*Harmonia hallii*)

Legal Status

Federal: None

State: None



© Glenn Clifton and CNPS

Global and State Conservation Status: G2S2.2: Global rank, G2 = Imperiled: At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors; State Rank S2 = Same as global rank, but only for the range of the taxa in California; State ranks in California often also contain a threat designation attached to the S-rank, S2.2 = threatened.

CNPS List: 1B.2; 1B: Rare, threatened, or endangered in California and elsewhere. 0.2: Fairly endangered in California.

Recovery Plan: None.

Species Description and Life History

Hall's harmonia (*Harmonia hallii*), formerly known as Hall's madia (*Madia hallii*), is a 5 to 18 cm (2 to 7 inches) annual herb in the sunflower family (Asteraceae) (Hickman 1993). This species is distinguished by its annual lifeform, 0.2 to 0.5 mm disk pappus scales, and club-shaped ray achenes (Hickman 1993). Hall's harmonia has rough congested leaves along the lower stems, erect solitary heads or rounded clusters of flowers with densely glandular peduncles, and bright yellow ray flowers (Hickman 1993; FNA 2007). It blooms from April to June (CNPS 2001).

Habitat Requirements and Ecology

Hall's harmonia occurs on serpentine soils in open, rocky areas within chaparral habitat, usually on hills and ridges from 500 to 900 m (1,640 to 2,953 ft) in elevation (CNPS 2001; CDFG 2007). Species growing with the Yolo County population of Hall's harmonia include whiteleaf manzanita (*Arctostaphylos manzanita*), scrub oak (*Quercus berberidifolia*), woolly sunflower (*Eriophyllum* spp.), and jewelflower (*Streptanthus* spp.) (CDFG 2007).

Species Distribution and Population Trends

Distribution

Hall's harmonia is endemic to California and its distribution, as defined by Calflora 2007, is based on 31 observations. There is one historic location in Yolo County in Little Blue Ridge (CDFG 2007). The range of Hall's harmonia extends from Lake and Colusa counties in the north, to Napa and Yolo counties in the south (Calflora 2007).

Population Trends

Population trends of Hall's harmonia have not been documented and it is unclear whether this species is in decline. According to the CNPS (2001), occurrences of Hall's harmonia in California are limited and the species is at risk throughout its range.

Threats to the Species and Other Conservation Issues

The primary threat to Hall's harmonia is the loss of serpentine habitat within the range of the species. Another possible threat to Hall's harmonia is mining (CNPS 2001). Hall's harmonia occurs on infertile serpentine soils in a landscape where wild fire and soil erosion are disturbance agents. Research should address the role of disturbance regimes and competition, dispersal vectors and the role of dispersal in maintaining the populations, seed bank dynamics and the possibility of fire acting as a germination cue, and plant breeding system and pollinator requirements.

Contributors to this species account:

Cathy Little, HT Harvey & Associates
John Gerlach, TAIC

References

Photo Credit: Copyright © Glenn Clifton and CNPS

Calflora: Information on California plants for education, research and conservation. (web application). 2007. Berkeley, California: The Calflora Database (a non-profit organization). Available: <http://www.calflora.org/>.

California Department of Fish and Game (CDFG). 2005. Knoxville Wildlife Area Management Plan. Approved by the California Department of Fish and Game, Central Coast Region.

California Department of Fish and Game (CDFG). 2007. Rarefind. California Natural Diversity Data Base (CNDDB). Electronic Database.

California Native Plant Society (CNPS). 2001. Inventory of Rare and Endangered Plants of California (6th edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, California.

Flora of North America (FNA). 2007 FNA Vol. 21 - Asteraceae – *Harmonia hallii*. Flora of North America Editorial Committee, eds. Flora of North America North of Mexico. 7+ vols. New York and Oxford. www.efloras.org accessed on line August 7, 2007.

Hickman, J.C. (ed.). 1993. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, CA.

DRAFT