

# Plant Guide



### **TARWEED**

## Hemizonia fasiculata (D.C.) Torr. & Gray

plant symbol = HEFA

Contributed By: USDA, NRCS, National Plant Data Center



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#### Alternate Names Clustered tarweed

#### Uses

Ethnobotanic: This tarweed is one of the tarweeds used in pinole, a staple food in the diets of the Indian people in Santa Barbara, Ventura, and Santa Ynez, California (Timbrook 1993). The seeds were toasted and then pounded into a black, dry flour with an agreeable taste. The roots of several *Hemizonia* species were eaten by the Miwok, who considered them to be an important part of their diet. The steam from boiling *Hemizonia fasiculata* was inhaled by the Kumeyaay to relieve headaches.

*Wildlife*: The dark seeds (achenes) of tarweeds are used as food by many birds and small mammals, including mourning doves, quail, blackbirds, finches, Oregon juncos, California horned larks, western

meadowlarks, American pipist, sparrows, towhees, chipmunks, ground squirrels, and mice. Cottontail rabbits, ground squirrels, and chipmunks eat the plants.

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

#### **Description**

General: Sunflower Family (Asteraceae). Hemizonia fasiculata is an annual herb, 0.5-10 dm tall. The stems are glabrous to sparsely short-bristly. The lower leaves are 3.5-15 cm, dentate to deeply lobed, and bristly. The upper cauline leaves are linear, entire, and appressed to the stem. The inflorescence is open to dense, with the 4.5-5.5 mm bell-shaped involucre, with 5 deep ray flowers and 6 disc flowers having yellow corollas and black anthers. The fruits are 2.5-5 mm beaked achenes.

#### Distribution

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. *Hemizonia fasicularis* is common in coastal grasslands and woodlands below 900 m elevations. It grows in southern California on the central coast, southern outer Coast Ranges, from southwestern California to central Baja California.

#### Establishment

Hemizonia species seeds ripen in late summer, usually in August in California. After gathering, seeds can be stored in a cool, dry place for at least a year and still maintain viability. Hemizonia species require well-drained, fairly dry soils with full sun. These annual species produce prolific seeds, and can be planted directly in the soil or in seed flats. Plant seeds at the soil surface or plant 1/8" to ½" in a well-drained soil. Water seedlings as the soil dries to stimulate growth. It is best to plant seeds in the fall. Fertilization stimulates growth and seed production.

#### Management

*Traditional Resource Management*: Resource management of tarweed includes the following:

- Seeds were distributed during the process of gathering seeds through seed beating.
- Burning occurred during September and October after ripened seeds were harvested. Grassland

- species were burned for plant improvement by the tribes throughout California.
- Seeds were planted from wild plants. A
  Diegueño woman reported her people always
  cleared a small spot near their dwelling to plant
  seeds of plants with greens, seeds, and roots.
- Ownership of seed-gathering grounds promoted long term care and sustainable harvest practices.

### Cultivars, Improved and Selected Materials (and area of origin)

HEFA is widely available through native plant nurseries within its range. Please check the Vendor Database, expected to be on-line through the PLANTS Web site in 2001 by clicking on Plant Materials.

#### References

Abrams, L. & R.S. Ferris 1960. *Illustrated flora of the Pacific states*. 4 Vols. Stanford University Press, Palo Alto, California.

Anderson, K. 1993. *Native Californians as ancient and contemporary cultivators*. IN T.C. Blackburn and K. Anderson (eds.). Before the wilderness. Environmental management by native Californians. Pages 151-174. Ballena Press.

Barrett, S.A. & E.W. Gifford 1933 *Miwok material culture Indian life of the Yosemite region*. Yosemite Association, Yosemite National Park, California. 388 pp.

Barrows, D.P. 1977. *Ethno-botany of the Coahuilla Indians*. Malki Museum Press. Morongo Indian Reservation. Banning, California. 82 pp.

Bean, L.J. & H.W. Lawton 1993. Some explanations for the rise of cultural complexity in Native California with comments on proto-agriculture and agriculture. IN: T.C. Blackburn and K. Anderson (eds.). Before the wilderness. Environmental management by native Californians. Pages 27-54. Ballena Press.

Hartmann, H.T., D.E. Kester, and F.T. Davies, Jr. 1990. *Plant propagation principles and practices*. Prentice Hall, Englewood Cliffs, New Jersey. 647 pp.

Hickman, J. C. (ed.) 1993. *The Jepson manual. Higher plants of California*. University of California Press. 1399 pp.

Martin, A.C., H.S. Zim, & A.L. Nelson 1951. *American wildlife and plants. A guide to wildlife food habits*. Dover Publications, Inc. New York. 500 pp.

Mayer, K.E. & W.F. Laudenslayer Jr. (eds.) 1988. *A guide to wildlife habitats of California*. USDA Forest Service, California Department of Fish and Game, and PG&E.

Murphy, E.V.A. 1959. *Indian uses of native plants*. Mendocino County Historical Society. 81 pp.

Strike, S.S. 1994. Ethnobotany of the California Indians. Volume 2. Aboriginal uses of California's indigenous plants. Koeltz Scientific Books, USA/Germany. 220 pp.

Timbrook, J., J.R. Johnson, & D.D. Earle 1993. *Vegetation burning by the Chumash*. IN: T.C. Blackburn and K. Anderson. (eds.). Before the wilderness. Environmental management by native Californians. Pages 117-150. Ballena Press.

USDA, NRCS 1999. *The PLANTS database*. National Plant Data Center, Baton Rouge, Louisiana USA. <a href="http://plants.usda.gov">http://plants.usda.gov</a> Version: 990518.

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