

Erechtites glomerata (Poir.) DC. (Asteraceae)
Australasian Fireweed

Description. Annual, sometimes persisting longer than 1 year, 1-20 dm tall, erect from a deep, often branching taproot. Stems erect, branches ascending, thinly villous to tomentulose. Leaves alternate, 6-15 cm long, lower leaves deeply pinnately lobed or pinnatifid, villous to tomentulose, becoming somewhat glabrous, the upper leaves pinnately to irregularly toothed. Heads in terminal, somewhat corymbose clusters or panicles, discoid (all flowers radial, salverform), 5-7 mm long, cylindrical, stalked. Phyllaries in 1-2 unequal series, oblong, glabrous to thinly tomentulose, the outer ones much shorter than the inner, apices acute. Flowers of two forms, the outer pistillate, the inner bisexual, corollas tubular, pale or dull yellow. Achenes 1-2 mm long, cylindrical, ribbed; pappus composed of fine, capillary bristles. In California, flowering from April to October (Allan 1982, Ferris 1960, Munz 1959).

Synonyms: *Erechtites arguta* (A.Rich.) DC.

Geographical distribution. *Erechtites glomerata* is native to Australia and New Zealand (Allan 1982, Chapman 1991). It apparently has become naturalized only in southern Oregon and California. (Anonymous 1998, Barkley 1993, Cronquist 1955, Munz 1959).

Erechtites glomerata was first reported from Humboldt County in 1918 (Robbins et al. 1970). Naturalized populations occur on San Miguel and Santa Cruz islands (Junak et al. 1997) and in scattered coastal counties from Humboldt south to Santa Barbara counties (Anonymous 1998).

Note: Two other species, *E. hieraciifolia* (L.) DC. (native to eastern North America) and *E. valerianifolia* (Wolf) DC. (native to central and South America) are introduced and naturalized more widely on the mainland. Both species have become naturalized widely in Japan and New Zealand (Ohwi 1965, Webb et al. 1988). *Erechtites hieraciifolia* has been introduced into Europe and western North America (Barkley 1993, Cronquist 1955, Tutin 1976), and *E. valerianifolia* into Australia (Chapman 1991).

Ecological distribution. In both natural and naturalized geographic ranges, Australasian fireweed occurs in waste places, grasslands, disturbed sites, forest margins, and pastures (Barkley 1993, Cronquist 1955, Munz 1959).

Reproductive and vegetative biology. Like other Asteraceae with a capillary pappus and small light seeds, Australasian fireweed probably has a relatively high level of dispersability (Anderson 1992, Sheldon and Burrows 1973). Seeds of *E. hieraciifolia*, a distantly related native of eastern North America, were found to remain dormant for as long as 8 years (Baskin and Baskin 1996). Baskin and Baskin found that about half of any year's seed production became dormant, especially if conditions (warm, moist) were not favorable to germination during late summer and early fall in eastern North America. Halvorson and Koske (1987) reported Australasian fireweed to be facultatively mycorrhizal, which may explain its invasibility of relatively arid grasslands on San Miguel Island and elsewhere. No other literature was found that discussed other aspects of reproductive or vegetative biology.

Weed status. Australasian fireweed is not considered a noxious weed in agricultural or horticultural practice, at least at a global level (not listed by Holm et al. 1977), nor is it apparently listed elsewhere in the United States (Lorenzi and Jeffery 1987). However, it is considered to be invasive in coastal woodlands and scrub vegetation of California (Anonymous 1996).

Fungal and insect pathogens. No literature was found that reported Australasian fireweed as a host of detrimental fungal or insect pathogens.

Herbicide control. No literature was found that reported herbicide treatment.

Literature Cited

- Allan, H.. 1982. Flora of New Zealand. Volume 1. Indigenous tracheophyta. Department of Scientific and Industrial Research, Christchurch. 1365 pp.
- Anderson, M. 1992. An analysis of variability in seed settling velocities of several wind-dispersed Asteraceae. *American Journal of Botany*. 79: 1087-1091.
- Anonymous. 1996. Exotic pest plants of greatest ecological concern in California as of August 1996. California Exotic Pest Plant Council. 8 pp.
- Anonymous. 1998. California county flora database version 2, Santa Barbara Botanic Garden and USDA National Plants Data Center, Santa Barbara and New Orleans. URL = plants.usda.gov
- Barkley, T. 1993. *Erechtites*. p. 250. In Hickman, J. (Ed.). The Jepson Manual: vascular plants of California. University of California Press, Berkeley. 1400 pp.
- Baskin, C. and J. Baskin. 1996. Role of temperature and light in the germination ecology of buried seeds of weedy species of disturbed forests: II. *Erechtites hieracifolia*. *Canadian Journal of Botany*. 74: 2002-2005.
- Chapman, A. 1991. Australian plant name index. D-J. Australian Government Publishing Service, Canberra. pp. 899-1709.
- Cronquist, A. 1955. Vascular plants of the Pacific northwest. Part 5: Compositae. University of Washington, Seattle. 343 pp.
- Halvorson, W. and R. Koske. 1987. Mycorrhizae associated with an invasion of *Erechtites glomerata* (Asteraceae) on San Miguel Island, California. *Madrono*. 34: 260-268.
- Junak, S., S. Chaney, R. Philbrick, and R. Clark. 1997. A checklist of vascular plants of Channel Islands National Park. Southwest Parks and Monuments Association, Tucson, AZ. 43 pp.
- Munz, P. 1959. A flora of California. University of California Press, Berkeley. 1681 pp.
- Ohwi, J. 1965. Flora of Japan. Smithsonian Institution, Washington D.C. 1066 pp.
- Robbins, W., M. Bellue, and W. Ball. 1970. Weeds of California. Documents and Publications, Sacramento, California. 547 pp.
- Sheldon, J. and F. Burrows. 1973. The dispersal effectiveness of the achene-pappus units of selected Compositae in steady winds with convection. *New Phytologist* 72: 665-675.

- Tutin, T. 1976. *Erechtites*. p. 191. In Tutin et al. (eds). *Flora Europaea*. Plantaginaceae to Compositae. Cambridge University Press, Cambridge. 505 pp.
- Webb, C., W. Sykes, and P. Garnock-Jones. 1988. *Flora of New Zealand*. Volume 4. Naturalized pteridophytes, gymnosperms, dicotyledons. Department of Scientific and Industrial Research, Christchurch. 1365 pp.