

ASCLEPIAS FASCICULARIS* DECNE*COMMON NAME: NARROW-LEAF MILKWEED,****MEXICAN WHORLED MILKWEED****FAMILY: ASCLEPIADACEAE****GROWTH FORM: PERENNIAL HERB****PLANTING**

Ideally, seeds of this species would be planted during October, before the winter monsoonal period of November through March. However, we have planted the species as late as December. Seeds were hand-sown onto mounded planting beds, and a thin layer of soil was then raked over them. The seeds germinate readily without any form of pre-treatment.

PHENOLOGY

In various years, we have observed *A. fascicularis* germinating in February, March, and April but we are not sure which month is the most typical. The species will typically flower from June through August. Fruits will begin to form during July and can typically be collected from late July through mid-September.

SEED HARVESTING

Fruits mature continuously over a period of several weeks, and therefore seed collection on multiple dates is ideal. It is difficult to collect seed of this species under windy conditions. Seeds are ready for collection when the fruits have dried and are about to split open, or have already split open. Seeds are brown when they are mature. The Monarch Watch organization states that fruits are mature when they are within a day or two of opening, and recommends that if the fruits don't open easily when squeezed, the seeds inside will not likely be mature (<http://monarchwatch.org/milkweed/prop.htm>).

SEED PROCESSING METHODS

It can be difficult to separate seeds from the long, silky hairs to which they are attached. Seeds can be separated from the silk by rubbing the plant material between two hands. We advise doing this outdoors because the silk fibers will become airborne. If processing seed indoors, we recommend wearing goggles and a mask over the nose and

mouth. [Hunt et al.](#) (2006) recommend placing fruits in pillowcases and beating vigorously until seeds separate from the fibers and collect at the bottom. The Monarch Watch organization recommends stripping the seeds and fibers from the fruit pods and placing them in a paper bag. Next, shake the contents of the bag vigorously to separate the seeds from the fibers, then cut a small hole in a corner of the bottom of the bag, and shake out the seeds (<http://monarchwatch.org/milkweed/prop.htm>)

CULTIVATION OVERVIEW

A. fascicularis was sown in the nursery for six years and we were able to collect seed during three of the years. We have observed monarch caterpillars (*Danaus plexippus*) and milkweed bugs on the nursery-grown plants. On a few occasions, the plants became infested with oleander aphids (*Aphis nerii*). At the nursery, *A. fascicularis* frequently germinates from the soil seed bank without having to be replanted. During the summer of 2007 when fruits were maturing, rabbits browsed *A. fascicularis* heavily, leaving behind only short, bare stems. It is surprising that rabbits foraged on *A. fascicularis*, given that milkweed sap is considered highly toxic.

A horticultural entry included in The Jepson Manual recommends that *A. fascicularis* requires excellent drainage, is intolerant of frequent summer water, and does best in full or nearly full sun (Hickman, 1993). The soils at the nursery are Tranquillity clay with poor drainage, but *A. fascicularis* individuals growing at the nursery appeared healthy.

ETHNOBOTANICAL USE

A. fascicularis was a valuable plant to many Native American tribes of the United States, and has a variety of ethnobotanical uses (for more information, refer to the NRCS Plant Guide listed below).

REFERENCES

- Hickman, J. C. (editor). 1993. The Jepson manual: higher plants of California. University of California Press, Berkeley.
- Hunt, J.W.; R.D. Boul, R.D. Brown, R. Matthew, D.A. Koenig, A. David, M. Leigh; and J.C. Pushnik. 2006. Propagation protocol for production of container *Asclepias fascicularis* plants (Potted nursery stock). California State University Research Foundation, Chico, California. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org>.

ADDITIONAL INFORMATION ABOUT *ASCLEPIAS FASCICULARIS*:

Internet Resources

Plant Guide from the Natural Resources Conservation Service (NRCS):
http://www.plants.usda.gov/plantguide/pdf/cs_asfa.pdf

Seed photos from the Rancho Santa Ana Botanic Garden:
<http://www.hazmac.biz/021104/021104AsclepiasFascicularis.html>

Data on seed abortion from the Rancho Santa Ana Botanic Garden (p.3):
http://rsabg.org/horticulture/Seed%20Program/Seed%20Collecting%20Guidelines_MDW3.pdf

Species profile from the Ladybird Johnson Wildflower Center at the University of Texas:
http://www.wildflower.org/plants/result.php?id_plant=ASFA

Propagation Protocol from the Native Plant Network (Hunt et al., 2006):
http://www.nativeplantnetwork.org/network/view.asp?protocol_id=3087

Literature

Brown, C.S. and R.L. Bugg. 2001. Effects of established perennial grasses on introduction of native forbs in California. *Restoration Ecology* 9: 38-48.

Hatfield, E. and S.R. Kephart. 2003. Reproductive isolation and hybridization between two milkweeds (*Asclepias fascicularis* and *A. speciosa*, Asclepiadaceae). *Madroño* 50: 170–180.

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PHOTOS

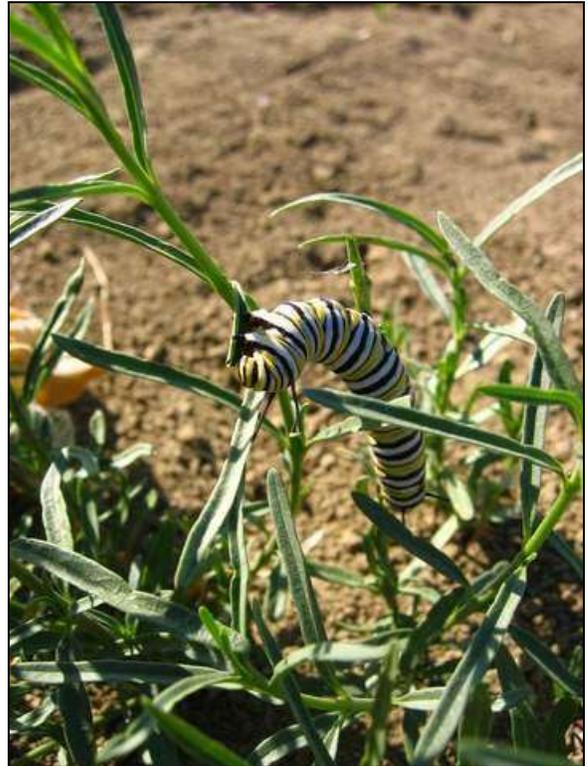


We have occasionally observed oleander aphid infestations (*Neris aphii*) on nursery-grown *A. fascicularis* plants.





A. fascicularis in cultivation at the native plant nursery. *Astragalus oxyphysus* (Mt. Diablo milk-vetch) is growing on the right.

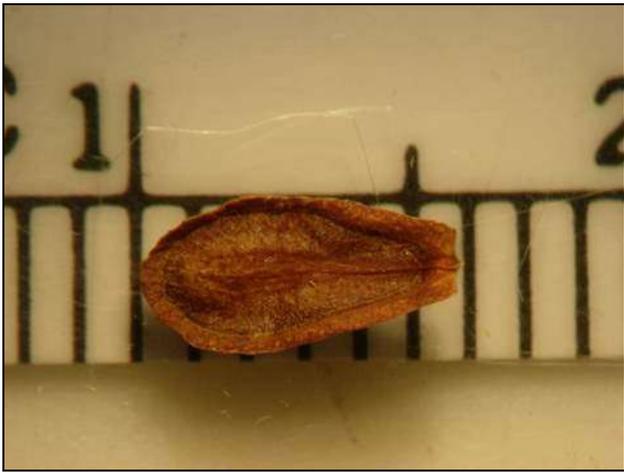


A monarch caterpillar feeding on *A. fascicularis* at the nursery.



A. fascicularis seedlings at the native plant nursery during April 2007.





A. fascicularis seed. Scale shown is millimeters.



A. fascicularis seeds. Scale shown is millimeters.