Asclepias fascicularis Decne.; Mexican whorled milkweed
Asclepias speciosa Torr.; showy milkweed

Mexican whorled and showy milkweeds

Family: Asclepiadaceae
Range: Mexican whorled milkweed is widespread throughout much of the western United States, including Washington, Oregon, Idaho, California, Nevada and Utah. Showy milkweed is found in all western states from Texas north to British Columbia.
Habitat: Roadsides, ditchbanks, pastures, and cultivated fields. Typically found in areas that remain moist through much of the summer, such as moist prairies and flood plains. They can grow in all soil textures from sea level to 7000 ft elevation.
Origin: Both species are native to North America.
Impact: Milkweeds are most problematic in pastures and range because in addition to being distasteful to livestock, the entire plant can be toxic to sheep, cattle, horses and domestic fowl. The toxic compound is considered to be cardenolide (cardiac glycosides). Typically, milkweeds are only eaten when forage is limited. In natural areas native milkweeds may be considered desirable plants, an important component of the plant community. The larvae of monarch butterflies feed solely on milkweed species.

Mexican whorled milkweed and showy milkweed are erect perennial forbs that grow up to approximately 3 to 4 ft in height. Their sap is a milky white latex. Mexican whorled milkweed has lanceolate leaves around 6 inches long and 0.75 inch wide. The leaves are arranged in whorls of 3 to 6 and are glabrous or covered with minute hairs. In addition, the leaves are often folded upwards along the midvein. Showy milkweed has oval to oblong-shaped opposite leaves covered with soft wholly hairs. The leaves are 4 to 7 inches long on short stalks.

Milkweeds reproduce by seed and underground roots, although the primary means of spread is by seed. They have an umbel-like inflorescence. Mexican whorled milkweed flowers are pale pink, purple or greenish-white. The flowers have 5 sepals and stamens. The petals are 5-lobed, reflexed downward, and 4 to 5 mm long. Showy milkweed has rose-purple colored petals with hairy backs and pinkish hoods that fade to yellowish.

Mexican whorled milkweed has narrow seed pods that are 2 to 3 inches long and smooth. The seeds are light brown, oblong, flattened, and 3 to 8 mm long with a tuft of deciduous silky hairs approximately 1 inch long. Showy milkweed pods are 3 to 5 inches long and densely covered with woolly hairs. At maturity the seed pods burst and while most seeds fall close to the parent plant, some can disperse greater distances in the wind. It is not known how long the seeds survive in the soil, but it is expected that it would be several years.

NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	Hand pulling is a viable method if the population size is very small. Mowing may reduce seed production but as the sole control measure will not kill milkweed. Tillage is not an effective control measure for milkweed because each root segment can give rise to a new plant.
Cultural	Grazing is not a viable control option for milkweed because it is both distasteful and toxic to livestock. Burning will probably top-kill milkweed, but the plants will likely recover from undamaged rhizomes.

	Some research has shown that burning stimulates resprouting and may also stimulate increased flowering and seed production.
Biological	Because these species are native to North America, there have been no biological control programs developed.

CHEMICAL CONTROL

The following specific use information is based on published papers or reports by researchers and land managers. Other trade names may be available, and other compounds also are labeled for this weed. Directions for use may vary between brands; see label before use. Herbicides are listed by mode of action and then alphabetically. The order of herbicide listing is not reflective of the order of efficacy or preference.

GROWTH REGULATORS	
Aminocyclopyrachlor + chlorsulfuron *Perspective*	**Rate:** 4.75 to 8 oz product/acre **Timing:** Postemergence when target plants are growing rapidly. **Remarks:** *Perspective* provides broad-spectrum control of many broadleaf species. Although generally safe to grasses, it may suppress or injure certain annual and perennial grass species. Do not treat in the root zone of desirable trees and shrubs. Do not apply more than 11 oz product/acre per year. At this high rate, cool-season grasses will be damaged, including bluebunch wheatgrass. Not yet labeled for grazing lands. Add an adjuvant to the spray solution. This product is not approved for use in California and some counties of Colorado (San Luis Valley).
Dicamba *Banvel*, *Clarity*	**Rate:** 4 pt product/acre (2 lb a.e./acre) **Timing:** Postemergence when the target plants are emerged and rapidly growing. **Remarks:** These specific milkweed species are not listed on the dicamba label but other milkweed species are listed. Dicamba is a broadleaf-selective herbicide often combined with other active ingredients. Several applications are likely needed for complete control. Dicamba is available mixed with diflufenzopyr in a formulation called *Overdrive*. This has been reported to be effective on some milkweed species. Diflufenzopyr is an auxin transport inhibitor which causes dicamba to accumulate in shoot and root meristems, increasing its activity. *Overdrive* is applied postemergence at 4 to 8 oz product/acre to rapidly growing plants. Higher rates should be used when treating perennial weeds. Add a non-ionic surfactant to the treatment solution at 0.25% v/v or a methylated seed oil at 1% v/v solution.
Picloram *Tordon 22K*	**Rate:** 1 qt product/acre (0.5 lb a.e./acre) **Timing:** Postemergence to rapidly growing plants at the bud to early bloom stage. **Remarks:** Picloram is sometimes used in a premix with 2,4-D (*Grazon P+D*) or tank mixed with 2,4-D at 1 lb a.e./acre plus a surfactant. Most broadleaf plants are susceptible. Although well-developed grasses are not usually injured by labeled use rates, some applicators have noted that young grass seedlings with fewer than four leaves may be killed. Do not apply near trees, or where soil is highly permeable and where water table is high. Picloram is a restricted use herbicide. It is not registered for use in California.
AROMATIC AMINO ACID INHIBITORS	
Glyphosate *Roundup*, *Accord XRT II*, and others	**Rate:** 2 qt product (*Roundup ProMax*)/acre (2.25 lb a.e./acre). Wiper treatment: 33 to 50% of concentrated product. **Timing:** Postemergence to rapidly growing milkweed at late bud to flowering stage. **Remarks:** Control of showy milkweed is difficult because of the pubescent leaves, and milkweed is often drought-stressed late in the season, which affects herbicide uptake and translocation. Repeated application over several seasons may be needed to provide complete control. Glyphosate is a systemic nonselective herbicide with no soil activity. Because there is often a significant height differential between milkweed and desirable pasture or range species, a wiper/rope wick applicator or some other selective application technology may be desirable. Spot treatment is also preferable when feasible.

RECOMMENDED CITATION: DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.