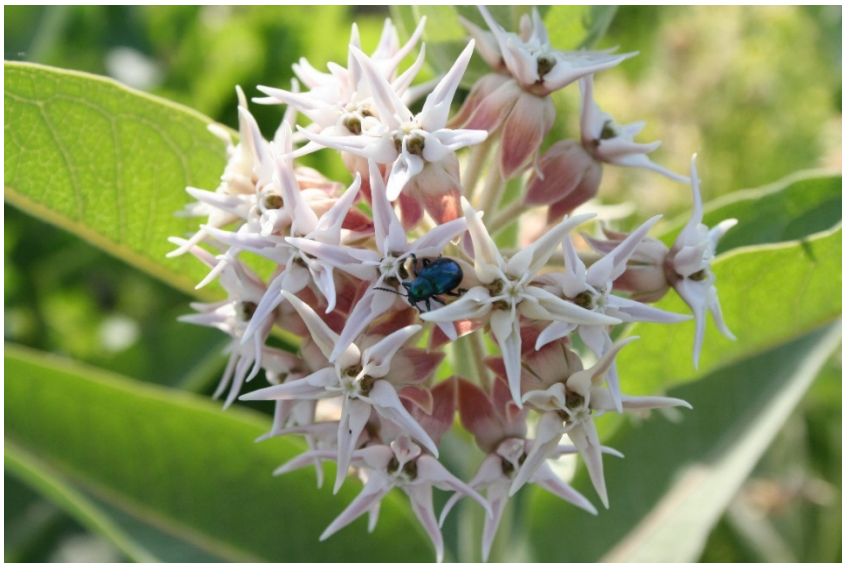
USDA United States Department of Agriculture

Natural Resources Conservation Service

SHOWY MILKWEED

Asclepais speciosa Torr.

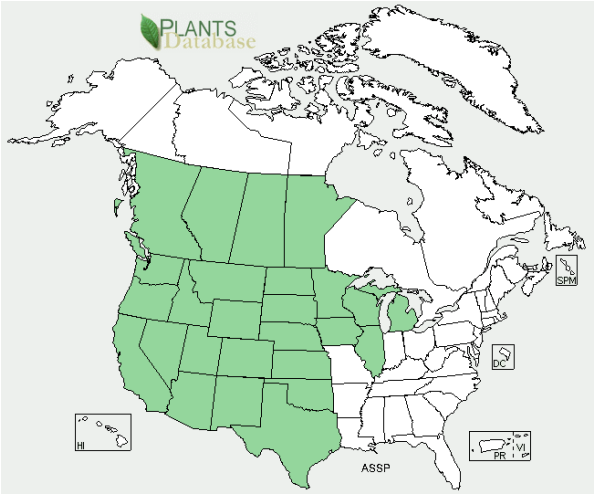
Plant Symbol = ASSP



Description

General: Milkweed Family (Asclepiadaceae). Showy milkweed is a native herbaceous perennial from widespread rhizomes, which produce stems that grow to 1½ to 5 ft tall in summer. The gray-green leaves are opposite, 4 to 7 inches long, oval, and covered in velvety hairs. Stems and foliage exude milky latex sap when cut. Flowers are in loose clusters at the top of the stems and are rose-purple, aging to yellow. Individual *Asclepias* flowers look like crowns, with the corolla (petals) reflexed, and hoods above the corolla. Plants flower from May to September. Thick seed pods 3 to 5 inches long split down one side in fall to release reddish-brown, flat seeds. Each seed has a tuft of white, silky hairs that allows them to be dispersed by wind. Leaves of first year plants are much narrower, about 0.5 inches wide, causing the plant to often be mistaken for other narrow-leaved species of milkweed.

Distribution:



For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. The plant occurs in California to British Colombia and Central Canada south to Texas.

Habitat: Showy milkweed is adapted to a broad range of moisture conditions. It is very commonly found along canal banks and riparian sites and in sub-irrigated or occasionally flooded wetlands with sedges and rushes. Populations can also be found however in very dry sites receiving less than 9 inches annual precipitation, though these populations are likely to be located in depressions where water accumulates.

Adaptation

This species typically grows in sites receiving 16 to 30 inches annual precipitation, but can be found in drier sites. It is adapted to a range of soil types, but prefers well-drained soils with a pH range of 5.0 to 7.0 (USDA NRCS 2016).

Uses

Insectary: Milkweed species are attractive to butterflies, bees, and other insects. Accordingly, this is a good horticultural plant for floral landscaping to attract butterflies (particularly Monarchs) and other insects. Monarch butterflies are specific to milkweed plants. This is the only type of plant on which the eggs are laid and the larvae will feed and mature into a chrysalis. It is important to have large clumps of milkweeds for the young caterpillars; their response to predation is to drop to the ground and "play possum." They cannot find their way back to the milkweed stems, which they need to survive, unless they are fairly densely spaced.

Monarch, Queen and Viceroy butterflies are Müllerian mimics; all are toxic, and have co-evolved similar warning patterns to avoid predation. Other insects, which utilize milkweed, include the large milkweed bug, common milkweed bug, red milkweed beetle, blue milkweed beetle, and bees.

Milkweed sap contains a lethal brew of cardenolides (heart poison), which produces vomiting in low doses and death in higher doses. Chemicals from the milkweed plant make the monarch caterpillar's flesh distasteful to most animals.

Ethnobotany
People have used milkweed for fiber, food, and medicine all over the United States and southern Canada. Fibers from the stems of milkweed have been identified in prehistoric textiles in the Pueblo region. Tewa-speaking people of the Rio Grande still make string and rope from these fibers. At Zuni, the silky seed fibers are spun on a hand-held wooden spindle and made into yarn and woven into fabric, especially for dancers. Pueblo people ate green milkweed pods and uncooked roots from one of the species that forms fleshy tubers underground.

Milkweeds (especially *Asclepias speciosa*) supply tough fibers for making cords and ropes, and for weaving a coarse cloth. Milkweed stems were collected after the stalks dried in late fall early winter. The dried stalks were split open to release the fibers; milkweed fibers were sometimes mixed with fibers of Indian-hemp (*Apocynum cannabinum*). The bark is removed and the fibers released by first rubbing between the hands and then drawing the fibers over a hard surface. Twisting the fiber opposite each other and twining them together formed the cord; often this was accomplished by rolling the fibers on the thigh while twisting them together.

Vast quantities of fiber plants are required for the making of nets, regalia, and cordage by California Indians. Blackburn and Anderson (1993) quote Craig Bates of the Yosemite Museum that it takes approximately five stalks of milkweed or Indian hemp to manufacture one foot of cordage. A Sierra Miwok feather skirt or cape contain about 100 feet of cordage made from approximately 500 plant stalks, while a deer net 40 feet in length contained some 7,000 feet of cordage, which would have required the harvesting of a staggering 35,000 plant stalks, (Barrett and Gifford 1933).

Milkweed has also been used as a food source by Native Americans. The young shoots, stems, flower buds, immature fruits, and roots of showy milkweed were boiled and eaten as a vegetable by various indigenous groups of eastern and mid-western America. In some areas the young leaves and stems were used as greens. The flowers were also eaten raw or boiled, and the buds were boiled for soup or with meat. The most common use for these plants, recorded among almost all the tribes throughout California, was to obtain a kind of chewing gum from the sap of showy milkweed. The sticky white sap was heated slightly until it became solid, then added to salmon fat or deer grease.

The sap of showy milkweed was used as a cleansing and healing agent by some of the desert tribes for sores, cuts, and as a cure for warts and ringworm. The silky hairs were burned off the ripe seeds, which were then ground and made into a salve for sores. Seeds were boiled in a small amount of water and the liquid used to soak rattlesnake bites to draw out the poison. A hot tea made from the roots was given to bring out the rash in measles or as a cure for coughs. It was also employed as a wash to cure rheumatism. The mashed root, moistened with water, was used as a poultice to reduce swellings.

Status
Threatened or Endangered: This plant is listed as threatened in Iowa (USDA NRCS 2016).

Wetland Indicator: FAC

Weedy or Invasive: Showy milkweed may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed (Whitson 1996). The light wind-dispersed seed allows it to invade agricultural fields. It also increases and spreads under grazing as most animals will avoid it while targeting preferred forage. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use.

Please consult the PLANTS Web site (http://plants.usda.gov/) and your state's Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Planting Guidelines
Showy milkweed can also be direct seeded in late fall to allow for natural stratification during winter. The full stand seeding rate to apply 25 to 30 seeds/ft is 8 lbs/ac. The seeding rate should be adjusted to reflect the desired percentage in a seed mixture. Seed should be planted shallow, no more than 0.25 inches.

Management
Milkweed thrives in disturbed sites where competition from other species is reduced. Grazing or burning in the fall or spring can open niches, reduce competition and increase sunlight for milkweed plants to establish and spread. Both milkweed and

dogbane were burned in the fall by California Indian tribes to eliminate dead stalks and stimulate new growth. Burning causes new growth to have taller, straighter stems with longer fibers. It also stimulates flower and seed production.

Pests and Potential Problems
Insects besides butterflies that tolerate milkweed toxins include the large milkweed bug (*Oncopeltus fasciatus*), common milkweed bug (*Lygaeus kalmii*), red milkweed beetle (*Tetraopes tetrophthalmus*), blue milkweed beetle (*Chrysochus cobaltinus*), and some aphids (*Aphis* spp.). These insects can occasionally cause feeding damage.

Environmental Concerns
Showy milkweed is native to North America and is a natural component of many ecosystems; however, it can become problematic in agricultural settings.

Several species of milkweed are highly toxic and have caused poisonings in a wide range of livestock including chickens, rabbits, horses, cattle, sheep and goats (Panter et al., 2014). However, showy milkweed is considered to pose considerably less of poisoning than other species (Burrows and Tyrl 2001). Showy milkweed is much less likely to be accidentally grazed in high quantities because it is distinctly different in appearance from neighboring grasses, while other milkweeds with fine, narrow leaves are prone to accidental ingestion in large quantities.

Although showy milkweed is bitter and typically avoided by cattle, cows will graze it when other forage is unavailable. Cows were observed grazing showy milkweed leaves and shoots to the ground in southeast Idaho after forage grasses had become coarse.

Control
Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

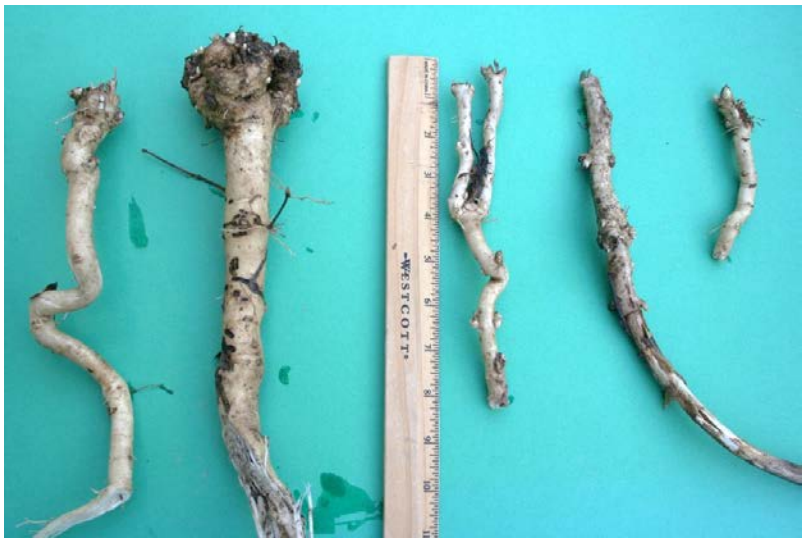
Seeds and Plant Production
Pods ripen indeterminately on the plant. Some after-ripening can be expected, but it is best to collect seed when pods are ready to split and seed is brown. Aberdeen PMC places pods on bed frames lined with ¼ inch hardware cloth. As the pods mature and are stirred the seed falls through mesh while the pod halves and the coma hair remains above. The hair can be easily vacuumed off with a shop vac. Corvallis PMC shovels dried pods into a combine and allows the combine to separate seed from the fluff.

Counts done at the Aberdeen, Idaho Plant Materials Center indicate there are approximately 240 seeds in each pod and 70,000-80,000 seeds/lb, so approximately 300 pods are needed to collect one pound of cleaned seed.

Showy milkweed seed is often dormant and requires a cold stratification treatment for germination; however seed collections in southeast Idaho and central California germinated at IDPMC did not require any stratification for full germination. Landis and Dumroese (2015) recommend cleaning the seed in a running water rinse prior to stratification.

Aberdeen PMC grows showy milkweed in 10 ci conetainers, by sowing approximately 5 seeds/cone covered lightly with gravel. Stratification has not been necessary for adequate germination. Soil is kept moist via overhead misting during the germination period. As plants develop the watering duration is increased to encourage root growth. Some thinning may be required but the PMC typically lets the plants stay thick because the taproot doesn't fill the cone well. Transplant success has been good as long as the soil is kept moist. Another option is to use Jiffy Peat Pots or other media that retains its shape and structure during planting (Landis and Dumroese 2015).

Propagation by rhizome cuttings is easy and reliable. The cuttings should be dug when the plant is dormant (generally from October through February or April depending on temperatures). Each piece of rhizome should have at least one bud. Plant the rhizomes 4 to 6 inches deep. Irrigation the first year will improve survival. Both seedlings and cuttings will usually bloom in the second year, although cuttings will occasionally bloom their first year (Young-Mathews and Eldredge 2012).



Whole Plant Collections: For milkweed species with rhizomes, propagation by cuttings of the tuberous rhizome is also easy and reliable. The cuttings should be made when the plant is dormant. Each piece of the rhizome should have at least one bud (they are about two inches apart). Timing of propagation is important. Harvest or divide plants and move them in October at the beginning of the rainy season. Place the plants in the ground by late fall so they can develop enough root growth to survive the winter. Irrigation the first year will improve survival, and by the second year the root system should be well enough established so plants will survive on their own. Both seedlings and cuttings will usually bloom in their second year, although cuttings will occasionally bloom during their first year (Kindscher 1992).

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

There are currently no released selections or cultivars of showy milkweed; however, seed from wildland collected material is readily available commercially. Plant materials should be selected based on the local climate, resistance to local pests, and intended use. Consult with your local land grant university, local extension or local USDA NRCS office for recommendations for use in your area**.**

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Citation
Stevens, M. 2000. Plant Guide for showy milkweed (*Asclepias speciosa)*. USDA-Natural Resources Conservation Service, National Plant Data Center.

Published 2000

Edited: 05dec00jsp; 17mar03ahy; 30may06jsp; 20dec16djt

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http://plant-materials.nrcs.usda.gov.

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