

Collecting and Propagating Common Milkweed (*Asclepias syriaca*)

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Identification and Collection

Identify common milkweed, *Asclepias syriaca*, at the collection site. Other species of milkweed you may encounter include swamp milkweed (*A. incarnata*), butterfly weed (*A. tuberosa*), and purple milkweed (*A. purpurascens*). Seed collection and propagation is similar for all species of milkweed. The following resources may be useful to help identify various species of milkweed:

<https://www.monarchwatch.org/milkweed/guide/>

<https://www.wildflower.org/plants/>

<https://monarchjointventure.org/resources/downloads-and-links>

Before collecting pods, permission is required from the landowner or land manager if the milkweed plants are not growing on your own property. Identify stems that are producing seed pods and are separated by at least 5 meters. *A. syriaca* is clonal, so the distance is intended to ensure that collections are from genetically distinct individuals and your future plants are genetically diverse. Only collect seed pods when they are mature (see photo). Pods are ready when the seam splits when you press on it. If the pods are not ready yet, you may put a rubber band on the pods to help prevent seeds from dispersing before you can collect the pod. Avoid collecting pods with milkweed bugs or milkweed bug damage, as these seeds may not be viable. Collect no more than half of the pods from an individual plant. This ensures that some seeds can disperse on their own into the surrounding landscape.



When seed pods are ready, collect pods individually (one pod in a bag) into labeled paper lunch bags or multiple pods into a large paper grocery bag or a bucket (with a lid). This will allow you to track which seeds were most viable later if you intend to germinate seeds indoors in the spring. If you are broadcasting seeds directly to soil outdoors, labeling collection bags is not necessary.

It may be possible to simply strip the seeds from the pappus (fluff/hairs) if the pod is newly opened. If this is not the case, add a coin or two with the seeds and pappus (removed from pod) to a paper lunch sack and shake vigorously. Cut a small hole in the corner to pour out the seeds. The procedure may need to be repeated several times until most seeds have been collected. Allow seeds to dry completely if they are not already dry. Put the seeds into a Ziploc-type bag labeled with the same information as the collection bag (if desired).

Direct Sowing Seeds Outdoors

Cold stratification of seeds is important to their germination success. Cold stratification is the process of subjecting seeds to both cold and moist conditions to break seeds from dormancy. If planting seeds in the fall, cold, moist conditions during winter will effectively cold-stratify seeds to enhance germination in the spring. Incorporate milkweed seeds into the top layer of soil in your flower bed, pots, or other designated area you intend to grow milkweed outdoors. To do so, evenly sprinkle seeds on the soil, then lightly rake the seeds into the soil. Gently tamp the soil surface to ensure good seed-to-soil contact.

If planting seeds in spring, seeds should be artificially stratified as described in the next section, then planted in the same manner as described above.

Germinating and Transplanting Seeds Indoors

Cold stratification of seeds still applies as mentioned in the previous section. Store the dry, collected seeds in the refrigerator, but this alone is not cold stratification. About 2 to 2.5 months before the average date of last frost, cold-stratify your seeds. To do this, combine seeds with an equal or great volume of damp sand, perlite, vermiculite, or other sterile media. Damp media should not drip when squeezed. The goal is to have all the seeds in contact with the damp media during the period of cold stratification. Label the seed/media mixture with the start date of cold stratification and store in a refrigerator for 3-4 weeks.

After the period of cold stratification, prepare trays or pots for planting with seed starter potting/planting mix. Plug trays or pots 5 inches deep (or more) are best for producing hearty milkweed transplants. Use a finger to create a shallow depression in each pot. Place one seed in each plug or pot. Multiple seeds may be planted in larger diameter pots. Cover the seeds lightly with dirt after planting. Water regularly to keep the soil damp and keep seedlings in well-lit, warm conditions until ready for transplant. If growing in plug trays, you can water from the bottom to avoid disturbing young seedling growth, but you do not want them standing in water. Clear domes or other clear coverings can be helpful to moderate soil moisture to ensure they do not dry up too much after seeding and when seedlings are very small.

Transplanting seedlings to the outdoors can occur when seedlings are at least 3 inches tall and when danger of frost has passed. Transplanting can take a toll on seedlings started indoors. Plants must acclimate to their new outdoor location before being planted. Set the trays or pots of seedlings outside in a shady, sheltered location for a while. Bring them back in if they wilt. Beware of wind – do not acclimate plants on days when high winds or thunderstorms are expected. Gradually increase the amount of time the plants are exposed to the outdoors and to sunny, exposed environments and overnight conditions. This can take up to a week. Always water seedlings as needed. If possible, transplant seedlings into their permanent locations on an overcast day to reduce transplant shock.

Seedlings can be transplanted directly into the ground or in deep pots (3 gallon or larger) sunk into the ground. Remember, common milkweed can spread and colonize an area via its root system, so planting in pots sunk into the ground will allow you control where the milkweed grows if you need to keep it “in bounds” in your landscape. Take care to minimize root disturbance during transplanting. Water the plants deeply at transplant and as needed for the first month or so after transplanting to promote establishment. Weed control/suppression will also be needed to prevent competition from other plant life. Young plants may also need protection from herbivorous wildlife such as rabbits and deer. As is common with most perennials, it will take 2-3 years of growth for most plants to fully establish and begin to flower. Young plants will still attract a host of invertebrate herbivores such as monarch and tussock moth caterpillars, milkweed beetles, milkweed bugs, and other milkweed-dependent insects prior to producing flowers.

References:

The Milkweed Adaptation Research and Education Network (MAREN), St. Olaf College. Website: <https://pages.stolaf.edu/milkweed/>

Borders, B. and E. Lee-Mädar. 2014. Milkweeds: A Conservation Practitioner’s Guide. 143 pp. Portland, OR: The Xerces Society for Invertebrate Conservation. Retrieved from http://www.xerces.org/sites/default/files/2018-05/17-031_02_XercesSoc_Milkweeds-Conservation-Guide_web.pdf