



Collecting & Cleaning Milkweed Seeds

Southern Oregon Monarch Advocates

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1. Safety First - Milkweed sap can irritate or even damage your eyes so wear gloves or wash your hands frequently. If milkweed sap gets into your eyes, seek medical attention immediately. (<https://monarchwatch.org/bring-back-the-monarchs/milkweed/harvesting-milkweed/>).

2. Determining Milkweed Seed Maturity – Milkweed seeds develop in overlapping rows along a central vertical placenta inside pods called follicles (Figure 1A). Pods mature slowly in the late summer and early fall. Showy milkweed seed pods develop individually along the stem whereas those of narrowleaf milkweed pods occur in twos or threes. Be aware that one pod may be mature right next to an immature one. The color of the seed pod should not be used as an index of seed maturity. Although pods may turn dark, the seeds inside may not be mature, and white or tan seeds should not be collected (Figure 1B). The best key to when milkweed pods are ready to harvest is when they split along the vertical seam, revealing the dark brown seeds (Figure 1C). It's important to realize that milkweed pods mature individually so seed collection can last over many weeks or even months (Figure 1D). So, it's best to collect ripe seed pods on a weekly basis but, if access is difficult, fasten a rubber band around the pod to keep the seeds from dispersing.

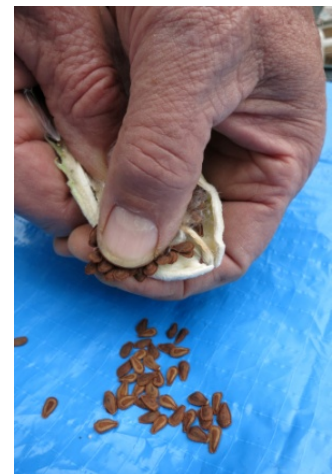


Figure 1 - Milkweed seeds develop in pods, and split open vertically when the dark brown seeds are mature (left). Pod color is not a good indicator of seed maturity: seeds inside this green showy milkweed pod are mature (middle), but those in a darker narrowleaf milkweed pod are not (right).

3. Cleaning milkweed seeds.

3.1 Shucking in the field - The easiest and most efficient way to clean milkweed seeds is to collect mature pods just as they begin to split open. Place your thumb over the top of the floss, and shuck the seeds into a container (Figure 2). This eliminates the floss and other impurities and results in seeds that only need minor cleaning. The drawback to this technique is that frequent trips are necessary to harvest pods as mature.

Figure 2 – The easiest way to clean milkweed seeds is to shuck the seeds as the mature pods are collected.



3.2 Separating seeds from the floss – The most common method of collecting milkweed seeds is to clip off already opened pods into a bag and accumulate them for later processing. Again, several trips are necessary to collect pods as they mature unless the pods have been secured with rubber bands. As long as the fruits are kept cool and dry, they can be stored for weeks or even months. Milkweed pods will continue to open as they dry which makes them easier to process.

Volunteer groups can process milkweed seeds with a couple of simple techniques:

Screening. Placing a handful of raw milkweed fruits on a screen and rubbing it back and forth allows the seeds to fall through (Figure 3A). The spent milkweed pods and floss remain on the top of the screen, and can be disposed of easily. A one-quarter inch mesh screen has been found to work well for both showy and narrowleaf milkweeds. Some seeds will remain mixed with the floss but efficiencies of 80-90% seed recovery can be expected.

Agitation in a zip-lock bag. Another user-friendly way to clean milkweed seeds is to place the entire pods into a quart zip-lock plastic bag along with a small weight. The agitation from shaking the bag vigorously will make the milkweed seeds fall to the bottom of the bag (Figure 3B). Clipping the bottom corner of the bag allows the milkweed seeds to be poured into a storage container. The clipped corner can be taped so that the same bag can be reused multiple times.



Figure 3 - Milkweed seeds can be separated from the floss by rubbing over a one-quarter-inch screen (left), or by agitation with a small weight in a quart-sized zip-lock bag (right).

4. Storing milkweed seeds – Zip-lock plastic bags are good for seed storage, but label them with the species and date of collection. Milkweed seeds stored under cool and dry conditions can remain viable for several years.