



Germinating Milkweed from Seed

Common Milkweed (*Asclepias syriaca*) Swamp or Red Milkweed (*Asclepias incarnata*)

The methods below are for Common Milkweed (*A. syriaca*) and Swamp Milkweed (*A. incarnata*).

1. Both species of milkweed require a cold, moist stratification period. This means that the seed after being harvested, dried and cleaned needs to have a “chilling” period. Nature’s method is done through the winter weather. To obtain similar results the seed should be mixed with moist sand, sealed in an airtight container, and placed in storage 33-38 degrees Fahrenheit. (A refrigerator works best). The period of chilling varies with the species. *A. syriaca* requires 30 days of cold stratification. *A. incarnata* requires 30-90 days of cold stratification. Some growers opt to soak the *A. incarnata* seed in hot water (190 degree F.) for 12 hours. www.usda.gov suggests this process be repeated for a total of 3 times before sowing the seed.

2. The seed can be sown in open trays using a commercial seed starter mix. It is usually better to sow seeds 2-3 per cell in a deep flat (cell counts vary). Cover very lightly with soil. I have found a 38 ct. 4 inch deep tray to work well allowing room for root growth and the least amount of disturbance when transplanting. However, commercial seeding trays can work if that is what is available. If the trays are to remain inside, the air temperature should be maintained between 65-75 degrees F. A heating pad made for starting seed can be used underneath to help with germination. Keep the soil moist by misting or spraying. Do not over water! A plastic cover can be placed over the tray until germination. Light is very important for continued growth and can be obtained by using a fluorescent overhead fixture. A timer placed on the light source will assure 14-16 hours of needed light. Plants usually take 4-8 weeks to reach a stage where they can be moved to a cold frame to harden off.

3. If you would like to sow in trays outside, you can follow the same instructions above, eliminating the need for the cold stratification as the outside temps will take care of it. Just keep in a protected area and check occasionally, especially as the weather warms. They will need watering after the last frost. Also, rodents can be a problem. A wire mesh covering can help. Again, a simple cold frame can speed the germination and growing time, but requires more diligence.

Butterfly Milkweed (*Asclepias tuberosa*)

The method below are for Butterfly Milkweed (*A. tuberosa*).

1. Butterfly milkweed requires a moist 30 day stratification of 33-38 degree Fahrenheit temp. Wherever you store your milkweed, make sure it is protected from rodents! They will find it in a garage or shed. Most people mix the cleaned seeds with moist sand and store in a refrigerator.

2. Select your tray for sowing. *A. tuberosa* does not like to be disturbed, it will send down a tap root. You may sow in a shallow tray until the first leaves appear, but be aware that transplanting the little seedlings into a larger container is time consuming and can be unsuccessful with *A. tuberosa* if the root is disturbed. I recommend sowing in a tray that is at least deep 3-4” deep with separate cells. This allows the roots to grow deep with little disturbance when transplanted. You may also use small homemade or peat containers to sow

in. Unwaxed small disposable cups will work but can break down too soon, (before it is time to plant into the garden). Experiment with what you have on hand.

3. Sow the seeds (you can leave them in the sand) in a clean germination mix. This mix is readily available in garden/home centers. Moisten the soil prior to sowing the seed, even prior to placing soil into the tray/container. Sow seeds lightly on the top of the soil. You may press in gently but they need light to germinate so please don't bury them. An alternative to pressing them in is to cover them (again lightly) with the germination mix or sand. It is typically best to just sow them and let them be (no covering at all).

4. Provide a heat source under the tray/container and a light source above. Mist/Spray to keep moist but not wet. You may cover with plastic/dome until germination. Air temp should be between 65-75 degrees Fahrenheit. Milkweeds do not like the cold! You will need to provide light; an overhead florescent fixture will work, at 14-16 hours a day. Once germination occurs, which can take up to 3 weeks, keep soil evenly moist, but on the dry side. Do not let the roots dry out but do not over water! *A. tuberosa* germinates best in very warm, bright locations.

5. Plan to transplant outside after hardening off, after the last frost, approximately 8-10 weeks after sowing seeds. Plant in a sandy soil in full sun. Keep moist until established. If using peat cups or another container that you are placing directly into the ground, place rim just below the surface of the soil to avoid the moisture being wicked away from the plant.

Helpful websites:

- www.usda.gov/factsheet/pdf/fs_asn.pdf
- www.ehow.com/info/8473460milkweed-perennials.html
- www.easywildflowers.com/quality/asc.syria.htm
- www.prairiemoonnursery.com

Tips:

The main difference between common/swamp and butterflyweed is butterflyweed's sensitivity to moisture. The tap root can rot quickly if too wet, and it germinates best when the seeds are covered ever so slightly with sand or just pressed into the soil mix. It hates being transplanted, and tolerates it far less than common and swamp--so starting with 3-4" cells is important. Common and swamp are not so finicky, they leave far more room for error.

Without a doubt, you will have much better germination rates if you start milkweed in pots indoors. If you sow 2 seeds in each cell, you can expect around 90% of your cells to have germination. When you sow directly outdoors in fall, probably only about 10-20% germinate at best.

Some people have trouble growing the seeds. They become frustrated by the low germination, or forget where they plant the seeds, and accidentally kill plants when weeding/cleaning their garden in spring. Milkweed comes up later than most garden cultivars, and that confuses people. People need to be patient in spring, and not give up too quickly--the plant will come up late, but grow quickly.