

# Monarch Gateway 501c3

## Milkweed Sprout Harvesting Propagation Method

Author: Barbara Keller-Willy [Barbarawilly@monarchgateway.org](mailto:Barbarawilly@monarchgateway.org) Document may be shared with permission of author. Monarch Gateway has a goal of 20,000 acres of restored Texas pollinator habitat by end of 2018.

1. Stratify Seeds
  - a. Write today's date and type of milkweed seed on ziplock bag.
  - b. Pour 4 cups vermiculite in zip lock bag.
  - c. Put seeds into dry vermiculite and mix, shake to distribute seed.
  - d. Make vermiculite slightly moist twice a few hours apart to achieve moist not soggy. (1-2 cups water total). *Goal is for all vermiculite to be moist, not dry, not soggy. Squeeze excess water from medium, then pour out of bag.*
  - e. Put in refrigerator for 6 weeks. I use 36 degrees exactly in a dedicated refrigerator with temperature on exterior door. In a regular refrigerator, place bags to rear of refrigerator to minimize temperature changes.
2. Sprout Seeds
  - a. After 6 weeks, remove from refrigerator. Lay bag on side, spread medium thinly and evenly across bag. Place bag in sunny window or under fluorescent light source until you begin to see evidence of first sprouting (white sprouts). Keep sprouts in bag 3-4 days up to one week.
  - b. Once sprouted, using a disposable foil pan or plastic nursery tray, slide entire mix into pan trying to keep same top orientation. Gently spread out into pan.



- c. After spreading into pan, lightly water. I use spray faucet with spigot water.
    - d. Cover tray/pan tightly with plastic wrap. Sit in warm, light location.
    - e. Seeds will continue sprouting for two-3 weeks. Keep medium moist but not wet.
3. Prepare pots
  - Pots should be washed, dried.
    - a. Prepare seed starter medium. Plant seeds in soil similar to that from which it was collected. Top soil similar to collection/destination soils can usually be purchased at landscape centers. If you can't use local soil, start with a garden mix amended with local soil. Add fertilizer, especially if using a purchased bag soil with lots of wood content. Mix half a wheel barrow of destination soil amended with garden mix. Clay loving milkweed plants need clay in soil! Sandy soil milkweeds can't be planted in clay!
    - b. Fill 4-6" tree pots with soil mix. Water gently to avoid washing out mix. Soak soil through to bottom of pot. Sit aside to drip. (I sit in water filled tray overnight to saturate.)
4. Plant Seedlings
  - a. Using pencil/chop stick, poking tool, poke hole in each moist prepared pot. Gently lift sprouting seed from sprout harvesting tray, place in prepared hole, seed/ leaf side up. Press soil to surround root.
  - b. When planting sprouted seedlings the biggest danger is not planting deep enough to completely cover tap root. Watch your seedling and add soil if tap root becomes exposed.
5. Simulate air flow
  - a. Using an oscillating fan if starting plants indoors, to simulate normal air movement for the planting area will slightly slow height growth but strengthen the stem system. Make sure you monitor water to compensate for air movement. Do not allow soil to dry completely.
6. Bottom watering/rain water
  - a. Watering with rain water increases successful propagation. If your plant seems to have died and you haven't over or under watered, continue watering until next season and see if plant returns when stressful condition, such as high heat, is gone.
7. Do NOT frequently repot milkweed. Bump up into 1 gallon pot where plant should remain for 1<sup>st</sup> year. Bump up into 3 gallon pots for second year. I don't plant plants in destination locations until the end of year 2.