

How to Grow Stevia and Make Homemade Stevia Extract

Gardening, Herbalism



Have you ever wondered if it was possible to learn how to grow stevia and make homemade stevia extract – that “miracle” plant that is sweeter than sugar – for sweetener instead of paying through the nose for those little packets in the store? You can grow stevia at home, in pots or in your garden, and harvest it for dried leaves or extract.

Starting Stevia Plants from Seed

The book “[Growing and Using Stevia](#)” states that darker seeds tend to have higher germination rates.

The instructions given below are based on those detailed in the book. Seeds should be started inside 8-10 weeks before transplanting outside.

Place 1-3 seeds in each cell and lightly cover with fine potting soil or vermiculite 1/8 inch thick. Spritz or mist with water to settle the soil. Place seeds under a clear plastic cover (you can recycle plastic produce

containers or use products specifically for seed starting). Use fluorescent lighting to supply light and keep the temperature between 75-80 degrees F. The book "Growing and Using Stevia" suggests keeping the lights on for 24 hours per day at first, then maintaining at least 15 hours of light about three weeks after sowing.

Seedlings should emerge in 7-14 days. Remove cover after seedlings emerge to help prevent damping off. When seedlings are growing strongly (have distinct leaves), thin them to one per cell by cutting off weaker plants at soil level.

The book suggests only watering from below every 3-5 days so the soil stays moist but not soggy. I watered mine the same as I water everything else – gently from above. A small amount of fish emulsion or other natural fertilizer may be added to the water as the plants grow.

How to Transplant Stevia Seedlings

When seedlings reach around 5 inches tall, trim 1-2 inches off the main shoot to promote branching. (You may use these leaves for sweetening.)

When you are ready to move your plants into a larger pot or the garden (at about 8-10 weeks after planting), they must be hardened off before moving outside. For pot plantings, move the seedlings to 4-5 inch pots. (They may be moved into larger pots as they grow.)

Harden off by moving pots/seedlings outside in a protected area out of direct wind and sun for a few hours each day, gradually increasing their time outside. When plants have had a chance to acclimate to outside conditions, pots may be moved into full sunlight and plants may be planted into the garden. The plants are tender and do not tolerate frost, so protect or move inside if temperatures are expected to drop below 40F. Stevia plants prefer not too heavy soil and neutral pH. (You may need to plant in raised beds or pots if you have heavy clay soil.)

In fall, bring the plant inside if desired. I dug up two of mine from the garden and they have now survived two winters. Here they are this spring before I cut them back. You can see they are reaching for the sun and getting a bit leggy.



Harvesting and Drying Stevia

Leaves may be harvested and used at any time. Fresh leaves pair well with mint for an easy, refreshing herbal tea. For a large single harvest, pick in late summer or fall just as plants are starting to blossom. If you wish to overwinter plants, leave at least 6 inches of plant intact to allow regrowth. Most recipes call for dried stevia powder or liquid stevia extract so that the flavor spreads more uniformly through the substance being sweetened, but feel free to experiment with fresh leaves.

When harvesting, the leaves are much sweeter than the stem, so the stem is typically discarded. Stevia is harvested and dried like most herbs. You can cut off the desired stems from the plant and bundle them in small bundles (less than 1 inch in diameter) and hang dry, and strip the leaves after they have dried. Alternatively, you can strip the leaves off the cut stems and dry them in a homemade or commercial dehydrator on low heat. Dried leaves will keep well for several years stored in a tightly sealed glass jar, and can be ground in batches as needed for recipes. 3-4 teaspoons of dried green stevia replaces one cup of refined sugar for sweetening, but you will need to experiment or find a good [recipe book](#), because substituting stevia will change the texture and baking properties of food.

How to Make Stevia Extract at Home

Making homemade stevia extract is actually pretty easy, once you have the stevia. You can use fresh or dried stevia, although I've read that extract from the dried leaves tends to be more bitter. I made an alcohol based extract with fresh leaves and it turned out quite well.

Homemade Alcohol Based Stevia Extract

Here's a bundle of leaves harvested from my stevia last fall.



If you look closely, you can see that the leaves and stems are somewhat fuzzy.



Start with clean stevia leaves, either fresh or dried. I rinsed my leaves off and gave them a spin in the salad spinner. Chop (or break up) the leaves (you don't want powder because it's very messy). Place the leaf bits in a glass jar, and then pour in enough alcohol to cover. I used vodka because it has the most neutral flavor. Label and put in a cool spot out of direct sunlight for two days, shaking or mixing gently a few times per day. (I put mine in my pantry. Note: The liquid level in the photo looks low because I am tilting the jar for the photo. The leaves should be submerged.)



Don't let it sit longer to try and get a stronger flavor. It will get more bitter. Don't include stems so you have more material. They don't contain much glycoside, which is what makes the stevia sweet.

After two days, strain your now pale leaves through a coffee filter, cheesecloth, flour sack towel or other fine material. I used my [jelly strainer](#) bag in the bottom of my regular strainer.



Take the stevia liquid and cook it over low heat – do not boil, or you will ruin it – it will burn and taste nasty.



Simmer gently for 20 to 30 minutes to drive off some of the alcohol and concentrate the extract. It will get darker and a bit thicker and some particulates may precipitate out.



Strain through a filter into an opaque bottle (I recycled a vanilla extract bottle). [Tincture bottles](#) are great if you have them on hand, as it only takes a few drops of extract to sweeten a drink or recipe.



Cover, label and date. This extract will keep for around three months in the refrigerator. I found this extract to be quite sweet with very little bitterness. Given that the tiny bottles of stevia extract generally sell for at least \$10 each, you can see how this would save you a lot of money over time if you use a lot of stevia.



Homemade Water Based Stevia Extract

Ingredients

- 1/2 cup dried stevia leaves, tightly packed
- 1 cup water

Directions

Bring water to a simmer in a small saucepan. Do not boil. you should see small bubbles only. Stir in dried stevia leaves and remove from heat. Cover and let steep for 40 minutes. Strain out leaves. Pour into a clean glass jar, cover and store in refrigerator for up to two weeks. Yields approximately 1/2 cup extract.

[Mountain Rose Herbs](http://www.mountainroseherbs.com/), <http://www.mountainroseherbs.com/> stocks both stevia seeds for planting and dried stevia leaves. They also carry an assortment of bottles, droppers and supplies.