

## **Hardshell Gourd Seed Germination**

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Lagenaria siceraria or hardshell gourds require a long growing season, 100 to 150 days. Their seeds are slow to germinate and in Indiana (zone 5) it is best to give them a head start.

These large, hard seeds may be scarified or scratched by rubbing the edges on a piece of medium grade sandpaper. This thins the covering. Or, they may be "notched" by taking a knife or nail clipper to one or both edges. This allows moisture to penetrate the seed more readily. Be very careful not to cut more than the hard covering or you will destroy the embryo inside the seed.

Always soak lagenaria seeds in water overnight (8 to 24 hours), even if you scarify or notch them. After soaking they can be placed in moist toweling or newspaper, wrapped in plastic to retain moisture, and placed in a warm environment (75 to 80 degrees Fahrenheit).

This place is as unique as people. The top of the water heater or refrigerator are simple favorites. Some rig a box above a heating pad and some even invest in a professional propagation mat. An egg incubator works very well! The more even the temperature, the quicker the results but always check after 3 to 5 days. Seeds that have sprouted should be removed and the rest left in the incubator. Do check daily once sprouting begins.

Place the sprouted seed in potting soil (we use Metro Mix 250 from our local greenhouse) in the largest container you can maintain until time to plant in the garden. We use 24 oz. cottage cheese carts with a hole punched in the bottom for drainage. They are free and the shape allows easy removal for planting without disturbing the root wad. Eliminating transplant shock is vital with gourd plants.

These sprout pots must be kept in a warm, well lighted environment. We place ours under a growlight and cover the whole frame with clear plastic. A painter's thin plastic drop cloth is cheap and adequate. The fluorescent lights give ample heat and the plastic holds the humidity. When the plant emerges from the soil, the light keeps it from becoming spindly.

The sprout you planted was the root. It may take 24 hours or longer for the seedling leaves to appear. occasionally, the hard covering will not pull off the seed leaves and the plant may not be able to develop. Sometimes we are able to remove the covering by gently squeezing it apart. Lee uses small pliers. Extreme caution is necessary in doing this as the stem will snap in two with very little pressure.

Once true leaves appear, we move the pots outside into a cold frame. They are able to adapt to outdoor conditions (natural light, wind, and rain) from the start and can easily be covered at night or if the weather turns blustery or cold.

Start this germinating process no more than four to six weeks before the last expected frost date for your area. The objective is strong, healthy plants to set into the garden with a head start on the growing season.