

Procedure for Germinating Small Seeds

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Small seeds, like MicroTina Tomato and Triton Pepper, benefit from germination in a container.*

1. Take a plastic container with a lid and fold layers of brown paper towel in the bottom until the stack is about 0.5 to 1.0 cm (1/4 to 1/2 inch) thick. Brown paper towels make it easier to see the white emerging roots.
2. Add cool tap water to the container until the paper towels are thoroughly soaked. Do not use soft water. It contains sodium, which is harmful to the germinating seeds.
3. Pour off excess water. When tilted onto a corner, there should be about 15 mL (1 tablespoon) of water in the corner. The seeds must be above the water level.
4. Place the seeds on top of the paper towels, about 1 cm (1/2 inch) apart.
5. Put the lid on the container to keep the paper towels from drying out and to provide a humid environment. It is not necessary to put holes in the lid. Opening the container every few days will provide enough oxygen for seed respiration.
6. Keep the container at room temperature and away from heating or cooling units, as percent germination can be decreased if the temperature is above 30 °C (86 °F).
7. Do not leave the seeds by a window or other source of bright or direct light. Classroom light levels are fine for germination. Seeds do not need to be in the dark.
8. Check the container daily to see if the paper towels are drying out. Maintain water level so there is about 15 mL (1 tablespoon) of water in a corner.
9. Check the container daily for any seeds covered in mold. These seeds are dead. A living seed can protect itself against mold growth. Remove dead seeds from the container.
10. When the root, called the “radicle”, appears, carefully transplant the seed to a pot. Pick the seeds up by the seed coat, and not by the radical, which is easily damaged.
11. Seeds should germinate in 4 to 7 days.



Container with paper towels and seeds



Germinating seeds with emerging roots. The fuzzy appearance is caused by healthy root hairs and is not mold. Seven seeds are ready to transplant. The remaining eight are not ready yet.



The two seeds on the left are healthy. On the right, the top seed is covered in a white mold, and the bottom seed is covered in a black mold. Both are dead and should be discarded.

*Larger seeds (wheat, soybean, and pea) can be planted directly into pots.