

# THE HOME GERMINATION TEST

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During the cold winter months, I find myself daydreaming about gardening and sowing seeds in the warm spring soil. While patiently waiting for the seasons to change, I like to keep myself busy reading gardening catalogs by the fireplace and mapping out what I am going to grow. Oftentimes I have seed packets with a few seeds left from the previous year. Some seeds can remain viable for years while others are only good for a single season. To save yourself a bit of time in the spring, running a quick germination test will help you determine what you can and cannot use.

Take at least ten seeds and spread them on a layer of damp paper towels. Cover the seeds with another layer of damp paper towels, leaving the seeds sandwiched between. Carefully slide the sandwiched seeds in a sealed plastic bag to keep it from drying out.

Next, label the bag with seed variety, number of seeds and the date. Place the seeds in an area that best matches the crop's germination needs. For warm season crops like peppers and tomatoes, temperatures between 70-80 degrees F. are best. Cool-season crops like peas and spinach germinate best at lower temperatures (55-75 degrees F.). A cooler area of your home, out of direct sunlight, will suffice.

After a couple of days, you can start checking under the paper towels to see if your seeds have begun to germinate. Remove any seeds that are moldy and count them as not viable. Periodically check on the moisture level of the paper towel too. If it begins to dry out, simply dampen it with a spray bottle. After a week or two, count the number of seeds that have germinated. Divide the number of healthy seedlings by the total number of seeds in the test and multiply by 100. For example, if you started with 10 seeds and had 8 sprout, your germination rate is 80%. This percentage will give you a good idea of how well your seeds will do in the garden. If only 50% of your seeds germinated in the paper towel, you can still choose to use these seeds, however, you will need to sow extra seeds to compensate. Alternatively, take out your favorite garden catalogs and order yourself new seeds. Onion and parsnip seeds will only last 1-2 years. Beans, broccoli, leeks and peas are good for 3 years, while squash, lettuce and kale seeds have an expected storage life of 5 years.

If you are interested in saving seeds, the best way to do this is to place them in a plastic container, glass jar or envelope. It is important the seeds remain dry. Adding a desiccant like powdered milk to the bottom of your container will help absorb any moisture. Date and label your containers. Then store in a cool dry location like a refrigerator. Some varieties don't have the same storage life as others, which is why germination tests are important.

For more information on germination and seed saving, visit Cornell University Library Guide on "seed saving" <http://guides.library.cornell.edu/c.php?g=31298&p=199476#12358215> online.

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