How do I know if my seeds are still viable?

As seeds age, they lose viability. Commercial packages generally indicate the germination rate for the year for which the seed was sold (e.g. 80 %) meaning that under good conditions 8 of 10 seeds will germinate. Tables are readily available to indicate average seed life expectancy. For instance, corn has a life expectancy of 2 years under good storage conditions, while squashes and pumpkins may last 5-7 years.

If you are not sure you can test your seed for viability using a germination test. It is best to start the germination tests in January so you are prepared and know which seeds you need to purchase.

How do I perform a germination test?

1. Fold paper towel into 2 layers and label paper with non-running ink with the name of the seed you want to test.
2. Moisten paper (moist but not wet)
3. Place 10 seeds onto paper with lots of space between seeds (1-2 cm).
4. Place moist paper towel into a ZipLoc bag.
5. Close ZipLoc bag and place in a warm, dark place (18-24 °C).
6. Carefully (so you don't dislodge seeds) open bag daily to let in air. Re-close to ensure consistant moisture content.
7. Observe germination. Seeds have germinated when the cotyledons have unfolded and tips of true leaves are just showing.
8. This process may take 1-2 weeks depending upon the seed type.

If 7 of the 10 seeds germinated, you have 70% germination: Not bad. If only 3 germinated, you might consider getting new seeds or seeding more heavily than you would normally.

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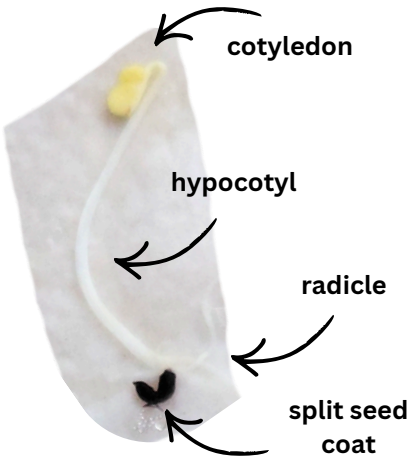
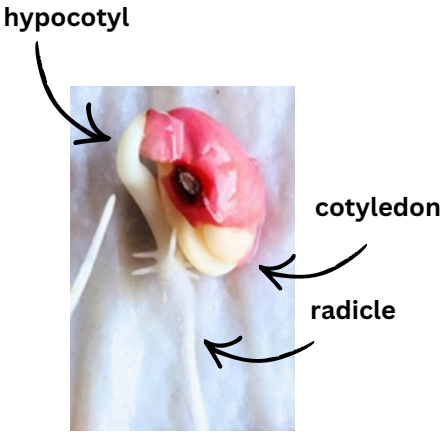
Germination time: 5 days

10 out of 10 germinated = 100% viability



How do I know if my seeds are still viable? cont.

BEANS



Germination time: 5 days **9 out of 10 germinated = 90% viability**

RESOURCES

1. Gilkeson, L. (2018). *Backyard Bounty (2nd ed.)*. Gabriola Island, B.C.: New Society Publishers.
2. University of Illinois Extension. *Will my seeds grow?* https://extension.illinois.edu/sites/default/files/seed_viability.pdf
3. University of Nebraska Lincoln. (2025). *Vegetable garden seed storage and germination results.* https://extensionpubs.unl.edu/publication/g2090/2011/pdf/view/g2090-2011.pdf