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Test Garden Seed Viability and Hold off Starting Transplants

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Gardening looks to be as popular this year as it was last spring. Now is the time to order seeds but if you grow your own transplants it's too early to start.

If you have leftover seed and are wondering if the seed is still viable or if you should order new, check the seed packet to see what date the seed was packaged and do a simple germination test.

Most seed remains viable for about 3 years, however, germination does decrease with age. Older seed needs to be tested and may need to be planted thicker.

For a germination test, place 10 seeds on half of a paper towel moistened with warm water. Roll or fold the paper towel twice and place it in a plastic bag with a few holes for air exchange. Place the bag in a warm place like the top of the refrigerator. Remoisten with warm water as needed.

After one week, remove and count all sprouted seeds. Return the moistened paper towel to the plastic bag for one more week, then count additional sprouted seeds. Add this to the first number to determine the percent germination. If only 50 percent of the seed germinates, plant the seed twice.

With more people gardening last year, some garden transplants were in short supply. If you're considering growing your own, know it can be challenging to grow sturdy transplants that perform well.

A few tips are to use potting mix and not soil as it carries disease that can kill seedlings. Provide adequate light which I will talk about later in this article. Provide warm temperatures during seed germination and cooler temperatures while transplants are growing.

Gently brush the small plants with your hand about 20 times once or twice a day. No, plants don't like to be petted. Brushing simulates wind in their natural outdoor environment and leads to sturdier transplants.

For now, determine when to start seed to avoid the common mistake of starting too early. Larger transplants do not provide an earlier harvest. Instead, they translate to later harvests and lower yields.

For cabbage, broccoli and cauliflower, start seed 8 weeks before the expected outdoor planting date sometime in April. Start tomatoes six weeks before their expected outdoor planting date in May.

Cucumber, squash, muskmelon and watermelon should be started only 4 weeks before planting in mid-May. Know that these four vine crops are easy to direct seed in the garden and this may be the best route to go for home gardeners.

For seed to germinate, some must have darkness or light. The seed of most plants germinate in either but some require darkness, like phlox and verbena. Others, such as begonia, coleus, geranium, impatiens, petunia and snapdragon require light and the seed should not be covered by soil.

All plants require 16 hours of fairly intense light once they germinate. South facing windows do not provide enough light so use fluorescent or LED fixtures. Suspend fluorescent lights 2 to 4 inches above plants. Use LED lights specifically designed to grow plants and follow manufacturer directions.

When growing transplants, leave the lights on for 16 hours each day, not any shorter and not any longer. Plants need this day length but also require a period of darkness each night to develop into sturdy transplants.