

How Do Your Seeds Grow?

WHAT

Seeds: The first thing you need to decide is what you want to grow. You can get a jump on the season by starting vegetables and flowers ahead of planting time. Look at the days to maturity information on the seed packet.

Direct Seeding: Some seed is better off directly sown into the ground once the soil is warm enough. For example, large seed, including Cucumber, Melons, Pumpkins, Sunflowers, Corn, etc.

Root varieties are often difficult to transplant and prefer to be directly seeded into the ground.

Storage: Store seeds in a cool, dry and dark place. The seeds need to be in an air tight container (i.e. mason jar, storage box, zip lock bag) and stored around 40 degrees. Heat and especially moisture are seeds worst enemy when it comes to storage.

Typically, seed is less viable over time and with particular varieties it is important to start with new seed. For example, Morning Glory seeds can be viable for 50 years whereas Snapdragon seed only last one season.

Soil: Your soil will need to be free of weeds and other harmful pathogens so that your seed will have the best start possible. It is best to use packaged seedling soil or learn the process of how to pasteurize your own soil. To pasteurize: Place soil in on a cooking sheet in the oven at 180 degrees and heat for 10 minutes.

You can also use a medium such as vermiculite or compressed peat pellets for germinating your seed.

Container: Sterilize your recycled container by rinsing container clear of soil, then use a 10% bleach , 90% water solution, soak for 20 minutes. You can use small peat pots, egg cartons, rolled newspaper pots as alternatives to plastic.

WHEN

Growing: On average most starts take 3 months to grow from plug to finished container; 6 weeks as plug/ 6weeks finished container or ground. However, this also varies, for example Dracaena can take 2 years to grow to finished form whereas Tomatoes will need to be transplanted within weeks of its sow date.

Again many seed packets will give you a date to sow indoors – how many weeks before the last frost date. Our last average frost date is May 10-12.

HOW

You have your soil ready, your seeds picked, now the planting!

HEAT, LIGHT, AND MOISTURE.

Germination: Seeds germination habits can vary, so it is best to read your seed package or do some research before *sowing*. Resources can be found on the internet or with the seeding staff at Edwards.

Important information to look for: Temperature needed for germination, sow date, grow time, moisture level, light requirement, and any special instructions (i.e. some seeds need to be cold stratified or scarified).

Cover: A general rule for covering seed, is if the seed is visible or larger than the soil grain it with often need to be covered with a 'sifted' layer of soil. However, if it is smaller than the soil grain, do not cover it with soil. Exceptions apply, so do your homework.

Watering: Keep seedlings evenly moist, DO NOT LET them DRY OUT! Covering your flat with saran wrap or some type of cover that keeps the moisture locked in can help keep moisture levels even. But, be cautious of over watering as well.

It is also important to water with a low pressure head so that the seedlings aren't displaced.

Air Circulation: A small fan will help with preventing damping off and the air movement will strengthen the plants. Also, try 'petting' them – gently drawing your hand across the tops of the plants.

Thinning: Be ruthless – pick the strongest seedlings and thin others out by cutting them off.

Transplanting: The first leaves to appear are the cotyledons or seed savers. Some advise that you don't transplant until the first true leaves appear – it is best to judge for yourself when the seedlings seem strong enough to transplant.

Hardening off: Place plants in sheltered place outside for a couple of hours each day, gradually increasing this time until temperatures are correct for outdoor planting.

Sowing Journal and Calendars: Both a journal and a calendar are a great way to keep track of your progress. Record all your basic germination information, plus any lessons learned or tips for next year.

Definitions:

Damping Off – a soil disease that attacks seedlings as they germinate and causes them to collapse. Clean conditions, good hygiene and air circulation help.

Direct Seed – to directly sow seed into ground.

Germination - The beginning of growth, as of a seed, spore, or bud. The germination of most seeds and spores occurs in response to warmth and water.

Propagate - To cause (an organism) to multiply or breed.

Sow- To scatter (seed) over the ground for growing. To spread (land, for example) with seed.

Scarified – Seeds with a hard seed coat are nicked to stimulate grow. This can be done by gently rubbing seed between two sheets of emery paper.

Stratification – is the process of pre-treating seeds to simulate natural winter conditions that a seed must endure before germination. Many seed species undergo an embryonic dormancy phase, and generally will not sprout until this dormancy is broken.

Taproot – a straight tapering root that grows vertically down. It forms a center from which other roots sprout. Plants with taproots are difficult to transplant.

Transplant - To uproot and replant (a growing plant).