Telly's info card

Growing Plants from Seed

Why grow from seed?

- Less expensive for mass plantings
- Grow varieties you may not find as plants
- To maintain the lineage of heirlooms
- The challenge & reward of growing plants from the beginning

Sources for quality seed

- Your local garden center
- Harvest seed from plants you already grow
- Mail order or on-line seed sources
- Cook's Seeds: Flowers & Vegetables on-line
- Select Seed: Fun Annuals & Vines on-line
- Tomato Grower's Supply: Tomatoes galore
- Thompson & Morgan: a vast selection by mail order

Containers

Trays with individual cells are best. Any seeds that you can handle easily should be sown separately into each cell. This will facilitate easier transplanting with less shock, encourage stockier growth, and reduce the risk of disease. There are a few seed varietiesthat can be sown with multiple seeds per cell (i.e.; Alyssum, Annual Lobelia, and Portulaca).

Very small seeds can be sown in "open trays" (no cells). These seeds can be mixed with sugar or fine sand (not salt) to help you keep from sowing too thickly. Closely sown seed is more difficult to transplant, will get "stretchy" or weak, & are more prone to damping off.

Soil

Seeding soils (or germination mixes) are formulated for optimum results. You can make your own by mixing one part each; sifted peat moss, fine vermiculite, & perlite. Soil-less potting mixes are sufficient for larger seed.

Labels

Don't take any chances here, especially if you are sowing multiple varieties. (We use Sharpies & plastic tags, but even popsicle sticks will do.)

Seed depth & covering

Check the seed package for sowing depth. If not listed, only cover seed that is large enough to pick up with a thin layer of vermiculite. (A small seed will wash into the soil when watered.) Large seed (the size of a corn kernel or larger) should be buried in the soil three times the seed thickness.

Light

A bright windowsill is adequate, but turn trays regularly.

Disease

The risk of disease in young seedlings can be greatly reduced by providing good air circulation (a small fan works well), preventing over or under-watering, and keeping adequate space between seedlings.

Water

Water gently from above (spray bottles work well), only enough to keep seed & soil moist. (See below for more detail.)

Feeding

Begin feeding with an All Purpose plant food, starting at 1/4 the recommended rate for stage 2, and 1/2 the rate for stage 3. A Full strength solution may be used after transplanting.

The Stages of Seedling Production:

STAGE ONE

Radicle (first root) emerges from seed.

- Extra heat & moisture are critical (72 degrees)
- Soil moisture should be kept high
- Air circulation & food are not necessary, light is not needed (for most seeds).

STAGE TWO

The first (seed leaves) are formed.

- Provide as much light as possible, without letting dry
- Use moisture, temperature & air to keep from stretching
- Heat & moisture should be reduced
- Air should be kept consistently moving
- Begin feeding with 1/4 strength solution

STAGE THREE

- The first true leaves appear.
- High light & good air movement are critical
- Water just before wilting occurs
- Keep at room temperature, cooler at night
- Increase feeding to a 50% solution

STAGE FOUR

Multiple true leaves are produced

- Avoid soft growth; begin hardening plants
- Water just before wilting occursProvide good air movement for strong roots
- Provide good air movement for strong roots and plants
 Keep at room temperature, cooler at night
- Reep at room temperature, cooler at mg
 Provide as much light as possible
- Begin feeding with a full strength solution of plant food after transplanting

