Potential Problems

Damping Off

Damping off is a fungus that attacks newly emerged seedlings typically caused by high humidity. Seed collapse and death is often a quick process. Sometimes this problem may appear as white fuzzy fungal growth on infected seedlings. Remove any and all infected seedlings to help prevent the problem from spreading. By following the recommended guidelines for seed starting, this condition is less likely to occur.

Transplanting and Hardening Off

Transplanting is transferring seedlings to larger containers giving them more room to grow. Hardening off is the process of adapting seedlings to outdoor conditions.

Easy To Start Seeds

<u>Vegetables</u> Tomatoes, Cucumbers, Cabbage

> <u>Flowers</u> Zinnias, Marigolds

> > <u>Herbs</u> Basil, Dill

For more information on gardening please visit: <u>http://web.extension.illinois.edu/state/</u> <u>horticulture/index.php</u>

or call University of Illinois Extension Knox County Office 309-342-5108

Other information brochures can be found online at <u>http://web.extension.illinois.edu/</u> <u>hkmw/hort.html</u>

Developed and Written by Knox County Master Gardeners and Kari Houle, Horticulture Educator, University of Illinois Extension Knox County February 2010



University of Illinois ~U.S. Department of Agriculture ~ Local Extension Councils Cooperating

University of Illinois Extension provides equal opportunities in programs and employment.

UNIVERSITY OF ILLINOIS EXTENSION HENDERSON, KNOX, MCDONOUGH AND WARREN COUNTIES

Knox County Office 180 S. Soangetaha Rd. Suite 108 Galesburg, IL 61401

 Phone:
 309-342-5108

 Fax:
 309-342-1768

 Email:
 uiemg-knox@illinois.edu

Starting From Seed Indoors



Garden Tips from Knox County Master Gardeners



Starting plants from seed can be a rewarding experience for a new or skilled gardener. Seed starting allows you to try plants or varieties of plants that may be difficult to find at the local nursery or garden center. Depending on plant choice and quantity desired, seed starting can be a more cost effective alternative than buying already started plants. Following a few basic guidelines you'll have healthy plants to start off the growing season.

Location, Space, and Time

When choosing a location, select an area that is relatively warm as seeds prefer temperatures of 70-75° F (avoid drafts). Allow for additional space as seeds germinate, grow, and will need to be transplanted into slightly larger growing containers.

Once your seeds are sown, give them a little daily attention.

Seed Starting Supplies

Containers

There are many options for containers, including seed flats, peat pots, or cell packs. Whichever container is chosen, be sure it is clean and sterile.

Growing Medium

A dedicated seed starting mix is a recommended growing medium, available at many garden centers or retail stores. These mixes are lightweight and sterilized, providing ideal conditions for seed germination.

<u>Water</u>

A misting bottle is the easiest way to keep moisture levels consistent without drowning seeds or seedlings. This is where daily monitoring is important to keep the soil from drying out which can halt germination or bring an unfortunate end to young seedlings. Too much moisture can cause seeds and seedlings to rot.

<u>Lights</u>

Indoor seed starting most often occurs during the shorter days of winter. Therefore, supplemental light will be needed as seedlings require 12 - 16hours of light daily. The easiest way to provide this light is by utilizing a shop light fixture with one warm white and one cool white fluorescent light bulb. The light source should be adjustable to maintain a distance of approximately 4 inches between seedlings and light bulbs.

<u>Heat</u>

As previously mentioned, seed germination requires temperatures between 70-75° F. Once the seeds have germinated, the seedlings prefer cooler temperatures of 50-60° F, but will tolerate warmer temperatures.

Seed Selection

After choosing the flower, vegetable, or herb seeds to start, it is important to read the information that is on the seed packet. Seed packets provide information on when to start seeds indoors, how deep to place the seed in the growing medium, light and water requirements, length of time until seeds sprout, and when to thin seedlings, among many other important details.

Planting Steps

- Dampen the growing medium prior to placing in container.
- Plant seed according to directions.
- To help increase humidity and warmth, cover the flat or container with clear plastic, making sure to remove after seeds have germinated.
- Check seed containers daily for moisture consistency. If the growing medium is drying out, use a mist bottle to add moisture.
- Once seeds have germinated and have developed true leaves, they will need to be thinned. The first leaf like growths are cotyledons, not true leaves. Following the cotyledons are the first true leaves.

Thinning

Thinning is the process of choosing the strongest and healthiest seedlings by carefully pulling or cutting off weaker or smaller seedlings. This provides the remaining plants more room to grow.