

Horticulture 2012 Newsletter No. 1 January 10, 2012

Video of the Week: [Easy to Make Grow Light](#)

Horticulture 2011 Indexed

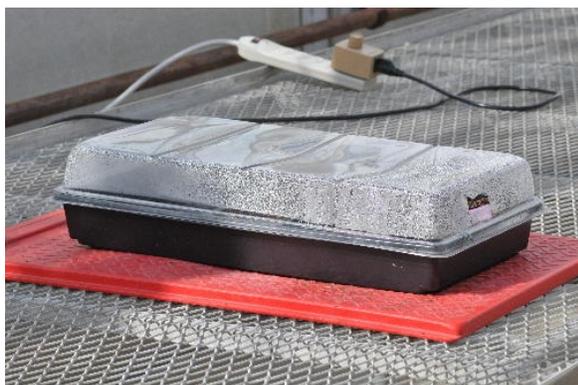
All of the articles published in Horticulture 2011 are now indexed in two different ways. The first is based on date and lists articles in order from January through December. The second is indexed by subject. Indexing by date is easy if using a spreadsheet. However, indexing by subject is a very time consuming under-taking. One of our Johnson County Extension Master Gardeners, Carole Brandt, has completed this task for us the last three years. Many thanks to Carole in making these past articles much easier to find. You can access the lists at the following locations. (WU)

Date Index: <http://www.hfr.ksu.edu/doc3298.ashx>

Subject Index: <http://www.hfr.ksu.edu/doc3297.ashx>

VEGETABLES

Starting Plants from Seed



January is often a cold and dreary month for many gardeners. However, planning for and starting vegetables and flowers from seed can make this a much more interesting time of year. Following are the steps needed to be successful in seed starting.

Purchase Recommended, Quality Seed: Start by taking a look at our recommended varieties at <http://www.hfr.ksu.edu/DesktopDefault.aspx?tabid=731>. These plants have proven themselves across the state of Kansas and is a good place to

start when deciding what to plant. However, also talk to your neighbors, friends and garden center about what has worked well for them. Obtain your seeds from a reputable source including garden centers and seed catalogs. If choosing seeds from a business that does not specialize in plants, pay special attention to the package date to make sure the seed was packaged for the current year. Though most seed remains viable for about 3 years, germination decreases as seed

ages. See the accompanying article on using old garden seed for more detailed information.

Determine the Date to Seed: There are two pieces of information that needs to be known in order to determine the date to seed: the target date for transplanting outside and the number of weeks needed to grow the transplant. The target date for transplanting the cool-season crops such as broccoli, cabbage, cauliflower and onions are the end of March to the beginning of April. Warm-season crops like tomatoes, peppers and most annual flowers are usually planted about May 10. There is a companion article in this newsletter listing common plants and the number of weeks needed to grow a transplant.

Sowing Seed: Do not use garden soil to germinate seed as it is too heavy and may contain disease organisms. Use a media made especially for seed germination.

Keep Seed Moist: Seed must be kept moist in order to germinate. Water often enough that the media never dries. Using a clear plastic wrap can over the top of the container until the new plants emerge can reduce the amount of watering needed.

Light: Most plants will germinate in either darkness or light but some require darkness (Centurea, Larkspur, Pansy, Portulaca, Phlox and Verbena) and others require light (Ageratum, Browallia, Begonia, Coleus, Geranium, Impatiens, Lettuce, Nicotiana, Petunia and Snapdragon). All plants require adequate amounts of light once emergence occurs. South facing windows may not provide adequate amounts and so fluorescent fixtures are often used. Suspend the lights 2 to 4 inches above the top of the plants and leave them on for 16 hours each day.

Temperature: The temperature best for germination is often higher than what we may find in our homes especially since evaporating moisture can cool the germination media. Moving the container closer to the ceiling (top of a refrigerator) can help but a heating mat is best for consistent germination. A companion article lists common plants and their optimum germination temperature. After plants have germinated, they can be grown at a cooler temperature (65 to 70 degrees during the day and 55 to 60 degrees at night). This will help prevent tall, spindly transplants.

Plant Movement: Plants react to movement. Brushing over the plants with your hand stimulates them to become stockier and less leggy. Try 20 brushing strokes per day. However, brushing will not compensate for lack of light or overcrowding. Plants grown under inadequate light will be spindly regardless of any other treatment.

Hardening Transplants: Plants grown inside will often undergo transplant shock if not hardened off. Plants are hardened off by moving them outside and exposing them to sun and wind before transplanting occurs. Start about two weeks before transplanting and gradually expose the plants to outside conditions. Increase the number of hours and degree of exposure over the two-week period. (WU)

Using Old Garden Seed



Seed catalogs seem to come earlier every year, and many gardeners already have a collection of them. Garden seed can be expensive, and you may want to consider using seed from previous years. Seed stores best if kept in a cold, dark, dry location. We normally consider seed will stay viable for about 3 years under these conditions though there are exceptions. For example, members of the carrot family (carrots, parsnips and parsley) are short-lived and are usually good for only 1 to 2 years. If you are unsure of viability and have plenty of seed, there is an easy method of determining how good your seed is. Place 10 seeds on a paper towel moistened with warm water and cover with a second moistened towel. Roll up the towels and place inside a plastic bag with enough holes for air exchange but not so many that the towels dry quickly. Place the bag in a warm place such as

the top of a refrigerator. Remoisten towels with warm water as needed. After the first week, check for germination. Remove sprouted seed and check again after another week. Add these numbers together to determine the percent germination. (WU)

Vegetables and Flowers Seeding Table



The following information was adapted from the North Carolina State Publication titled "Starting Plants from Seeds," HIL-8703

<u>Plant</u>	<u>Time to Seed Planting Date*</u>	<u>Germination Temperature**</u>
Ageratum	8	70
Alyssum	8	70
Aster	6	70
Balsam	6	70
Begonia	12 or more	70
Broccoli	8	70
Browallia	12 or more	70
Cabbage	8	70
Cauliflower	8	70
Celosia	8	70

Centuria	6	65
Coleus	8	65
Cosmos	4 or less	70
Cucumber	4 or less	85
Dahlia	8	70
Dianthus	10	70
Eggplant	8	70
Geranium	12 or more	70
Impatiens	10	70
Larkspur	12 or more	70
Lettuce	8	70
Marigold	6	70
Muskmelon	4 or less	85
Nicotiana	8	70
Pansy	12 or more	65
Pepper	8	80
Petunia	10	70
Phlox	8	65
Portulaca	10	70
Snapdragon	10	65
Squash	4 or less	85
Stock	10	70
Tomato	6	80
Verbena	10	65
Vinca	12 or more	70
Watermelon	4 or less	85
Zinnia	6	70

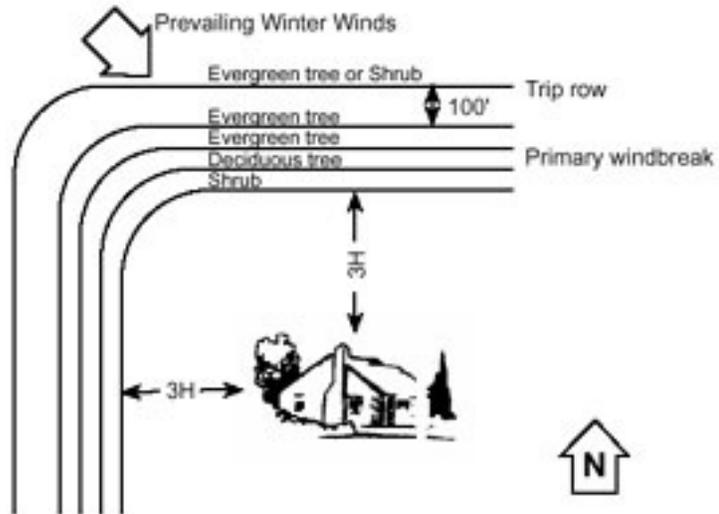
* Number of weeks before transplanting to seed.

** Temperature in degree F

MISCELLANEOUS

Conservation Trees from the Kansas Forest Service

The Kansas Forest Service offers low-cost tree and shrub seedlings for use in conservation plantings. Plants are one to two years old and sizes vary from 5 to 18 inches, depending on species. Orders are accepted from now through the first full week in May each year, but order early to insure getting the



items you want. Orders are shipped from the second week of March through May 5.

Approved uses for these plants include windbreaks, wood lots, riparian plantings, wildlife habitat and Christmas trees. They may not be used for landscape (ornamental) plantings or grown for resale.

All items are sold in units. Each single species unit consists of 25 plants. For example, a unit of Eastern red cedar has 25 trees per unit. Though a single species unit is most commonly purchased, four special bundles are also available including a songbird bundle, quail bundle, pheasant bundle and wildlife mast bundle. For details and an order form, go to:
<http://www.kansasforests.org/conservation/index.shtml>

Order forms are also available from local K-State Research and Extension offices. (WU)

Contributors: Ward Upham, Extension Associate

To view Upcoming Events: <http://tinyurl.com/fswqe>

[Horticulture 2012 E-mail Subscription](#)

For questions or further information contact: wupham@ksu.edu

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

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