

Horticulture 2013 Newsletter No. 1 January 8, 2013

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

Horticulture 2012 Indexed

All of the articles published in Horticulture 2012 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 four years. Many thanks to Carole in making these past articles much easier to find. You can access the lists at the following locations.

Date Index: <http://www.hfr.ksu.edu/doc3584.ashx>

Subject Index: <http://www.hfr.ksu.edu/doc3583.ashx>

You can then go to <http://www.hfr.ksu.edu/p.aspx?tabid=1040> to find the article by date.
(Ward Upham)

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 this 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 over the top of the container can reduce the amount of watering needed. Remove the wrap after the seedlings emerge.

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 over-crowding. 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)

Vegetables and Flowers Seeding Table

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

(<http://www.ces.ncsu.edu/hil/hil-8703.html>)

<u>Plant</u>	Time to Seed Before Germination	
	<u>Planting Date*</u>	<u>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

(Ward Upham)



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)

ORNAMENTALS

The Many Faces of Witchhazel



My mother used to buy it when I was a kid. It was a clear liquid used as an astringent. She kept it under the sink and I'd take it out to look at it now and then—the yellow label skin care line and the blue label “T.N. Dickinson’s Witch Hazel: Clean It, Soothe It, Treat It.” It does everything!

A little homework on my part revealed that witchhazel has been, and continues to be, an effective herbal remedy for a variety of skin conditions. It got its start in cosmetics in 1846 when Mr. Theron T. Pond took note of a “tea” created from the leaves and bark of a native shrub and used by the Oneida Indians in Central New York to treat burns and other skin conditions. He named the extract “Golden Treasure.” Later, shortly before his death, he sold the business and the new company named the product “Pond’s Extract,” which is still sold today as “Pond’s Cold Cream” on supermarket shelves everywhere. Check labels on some of your products (Procter & Gamble, Estee Lauder, L’Oreal, Netrogena, Olay, etc.) and I’ll bet you see it in the ingredient list.

That’s what Witchhazel meant to me until just a few years ago.

But that’s not all it has to offer. Witchhazel (*Hamamelis* sp.) is a beautiful, adaptable ornamental plant. Few plants bloom in the dead of winter—*forsythia* is notable for blooming in the early spring—but *hamamelis* is an exception. While *forsythia* has bright yellow blooms, witchhazel has more yellow/orange/red tones in the small strap-like petals. The fragrant blooms persist for more than a month and resist winter weather.

Three species of *hamamelis* grow well in Kansas. The hardiest, largest (up to 20-feet tall), and the one from which the witchhazel extract is distilled is the common witchhazel (*hamamelis virginiana*). It blooms in the late fall, October to December, and sometimes the rich yellow fall color obscures the blooms. This native shrub can be grown in full sun for best flowering or partial shade.

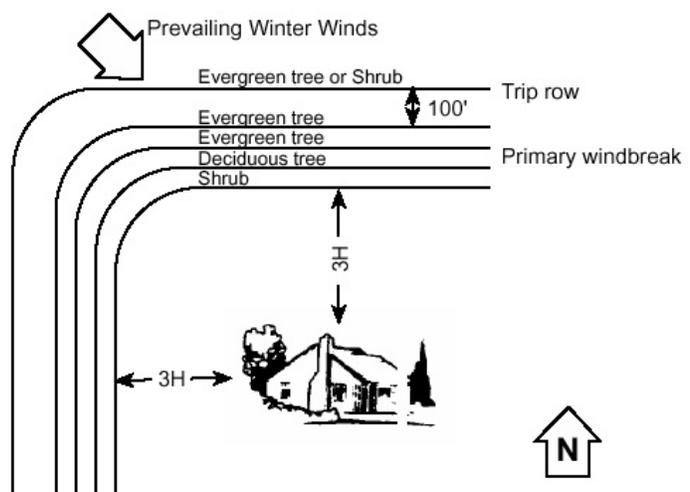
The second and smallest (about 5 to 10-feet tall) of the three species is *hamamelis vernalis* (vernal witchhazel). It begins flowering in January and continues all the way through March. Lastly, we have *hamamelis x intermedia*, a group of hybrids with intermediate characteristics usually resulting in early spring flowering like the vernal witchhazel. A popular cultivar, ‘Arnold’s Promise’ has clear yellow flowers with a hint of red in the center. Fall color of *hamamelis x intermedia* is a rich yellow to orange/apricot.

Back to the extract industry. Interestingly, witchhazel isn’t farmed in the traditional sense of the word. *Hamamelis* plants aren’t lined out in rows in a field. They’re still considered brush, part of the forest understory and are harvested (i.e. cut just above the crown and pulled out of the woods in the snow and scrub, November to April) before being chipped and sold to the distillery. In fact, according to one story I read, there are about 8 families in the witchhazel capitol of the world (East Hampton, Connecticut) that harvest most of the shrubs used in cosmetics around the world.

Though witchhazel is considered brush in some parts of the country, it excels as a shrub or small tree in the home garden. I don’t see many of them in residential landscapes, but their winter flowers and brilliant fall color certainly merit more use. Keep your eye out toward the end of this month for the yellow/red/orange blooms of witchhazel. (Cheryl Boyer)

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. (Ward Upham)

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

The web version includes color images that illustrate subjects discussed. To subscribe to this newsletter electronically, send an e-mail message to cdipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.

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