

**Yard and Garden - 02-25-2012 - Ted Griess / Extension Horticulture Assistant**

Of late, I am reminded of an old Swedish proverb. *All the flowers of tomorrow are in the seeds of today.* Although outdoor temperatures remain somewhat frigid, I began planting flower seeds — indoors that is.

Most commercial growers started growing flowers from seed weeks ago. Did you know that a number of annual and/or perennial flowers that we purchase as transplants in the spring were started as early as December? Many flowers, as well as vegetables, require a longer growing season to fully mature. On the other hand, a good number will grow quickly from seed, even when planted directly into the landscape after outdoor conditions become favorable.

Gardeners start their own plants from seed for a number of reasons. Greater varieties of plants are available when purchased as seeds; whereas, only a select few are usually available as transplants for sale at local garden centers. Saving money is another reason gardeners start plants from seed. Often a single plant purchased at a garden center will cost as much or more than an entire packet of seeds that has the capability of producing many plants.

I start some of my plants from seed for those very reasons, but I also do it because I enjoy nurturing a little patch of living-green indoors, while outdoors, winter weather looms.

Knowing when to start seeds indoors is extremely important. The goal is to have seedlings ideally sized when it is time to transplant them into the garden. Sowing dates depend on how quickly the seeds germinate, whether they prefer cool or warm growing conditions and how long it takes them to reach ideal transplanting size. These criteria are contingent upon and timed to the last average spring frost date, which for central Nebraska is May 15. Most of this important planting information is printed on the back of a seed packet.

The attached chart from Iowa State University provides germination information for many commonly grown annual flowers.

<b>Annual</b>	<b>Germination Temperature (Fahrenheit)</b>	<b>Lighting</b>	<b>Days to Germination</b>	<b>Weeks Sowing to Planting</b>
Ageratum ( <i>Ageratum houstonianum</i> )	70-75	L	7-10	8
Snapdragon ( <i>Antirrhinum majus</i> )	70	L	7-14	8-12
Wax Begonia ( <i>Begonia x semperflorens-cultorum</i> )	70-75	L	14	10-12
Annual Aster ( <i>Callistephus chinensis</i> )	70	L-D	7-10	6-8
Vinca ( <i>Cathranthus roseus</i> )	70-75	L-D	14	10
Cockscomb ( <i>Cleosia spp.</i> )	70-75	D	7-10	6-7
Bachelor's Button ( <i>Centaurea cyanus</i> )	65-70	L-D	7-14	8
Cosmos ( <i>Cosmos spp.</i> )	70	D	5-7	4-6
Lisianthus ( <i>Eustoma grandiflorum</i> )	75	L	10-14	14
Globe Amaranth ( <i>Gomphrena globosa</i> )	70	L-D	14	7-8
Sunflower* ( <i>Helianthus annuus</i> )	70	D	5-7	3-4
Strawflower ( <i>Helichrysum bracteatum</i> )	70-75	L-D	7-10	6-8

Impatiens ( <i>Impatiens wallerana</i> )	70-75	L	10-14	8-10
Annual Statice ( <i>Limonium sinuatum</i> )	70	L-D	7-10	8-10
Pansy ( <i>Viola x spp.</i> )	65-70	D	10-20	12
Four-O'Clock ( <i>Mirabilis jalapa</i> )	70	D	5-7	6-8
Flowering Tobacco ( <i>Nicotiana glauca</i> )	70-75	L	10-14	8
Geranium ( <i>Pelargonium x hortorum</i> )	70-75	D	7-21	12
Petunia ( <i>Petunia x hybrida</i> )	75	L	7-10	8-14
Moss Rose ( <i>Portulaca grandiflora</i> )	75	L	7-10	10
Black-Eyed Susan ( <i>Rudbeckia spp.</i> )	70	L-D	7-14	10
Red Salvia ( <i>Salvia splendens</i> )	70-75	L	10-14	8
Mealycup Sage ( <i>Salvia farinacea</i> )	70-75	L	10-14	8-9
Creeping Zinnia ( <i>Sanvitalia procumbens</i> )	70	D	7-10	6-7
Coleus ( <i>Solenostemon spp.</i> )	70-75	L	10-14	8-10
Dahlberg Daisy ( <i>Thymophylla tenuiloba</i> )	65-70	L	14	8
Nasturtium* ( <i>Tropaeolum majus</i> )	65-70	D	10-14	5-6
Zinnia ( <i>Zinnia elegans</i> )	70	D	5-7	5

Note the column titled **Lighting**. Light conditions during germination are critical for many annual flowers. Some seeds require light for germination; while others perform better in darkness. In the table above, L shows light is needed; whereas, the D represents darkness. Those listed as L-D succeed if grown under either condition.

Next week I will examine what is needed to start seeds indoors. As a result, you, too, may soon be growing tomorrow's flowers from the seeds of today.