

# Annual Flower Seed Germination Guide

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Although most gardeners purchase their bedding plants at garden centers in the spring, it's fun to get a head start on the upcoming garden season by starting flower and vegetable seedlings indoors. Growing quality seedlings indoors requires high quality seeds, a well-drained, disease-free growing medium, containers, proper temperature and moisture conditions, and adequate light.

Germination requirements (light and temperature) vary among the different flowers and vegetables. The various crops also differ in the length of time from seed sowing until the seedlings are transplanted outdoors.

The following chart provides germination information for many of the 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	8-10
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
Melampodium ( <i>Melampodium paludosum</i> )	65-70	L-D	7-10	7
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	8-10
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

\*Sunflowers and nasturtiums do not transplant well. Both should be seeded directly into peat pots.

Light conditions during germination are critical for many annual flowers. The seeds of some plant species require light for germination. (In the table above, annuals that require light for germination are designated with the letter L in the lighting column.) After sowing these seeds, lightly press them into the germination medium, but do not cover them. The seeds of other flowers require darkness (D) and should be covered with the germination medium. Finally, those designated L-D should be lightly covered, leaving the seeds as close to the soil surface as possible.

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