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G84-721 Growing Annual Flowers

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Growing Annual Flowers

This NebGuide discusses using annuals in landscape design, how to select transplants and proper seeding, planting and cultivating methods.

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Annual flowers can be a prime source of color to accent and enliven a home's landscape. While flowering trees and shrubs provide short bursts of color, most annuals begin blooming within a month of planting and flower until frost. The wide range of colors, sizes and species adapted to either sun or shade makes it possible to plant annual flowers almost anywhere. Annuals are perfect for beds, borders, rock gardens, window boxes, hanging baskets or as temporary ground covers and fillers.

Annuals are non-woody plants that complete their life cycle in one season, ending with seed production. Confusion can arise when an annual plant reseeds itself and appears to have a perennial habit.

Use in the Landscape

Annual flowers can play an important role in a well-designed landscape. Compared to most perennial landscape plants, annuals require higher levels of both maintenance and water, so plant annual beds in easily-accessible areas and near water sources. Concentrate annuals in beds with other annuals or plants with similar water requirements. Planting annuals randomly throughout the landscape not only increases maintenance, but also lessens the plants' aesthetic impact.

Although annual flowers and plants bring a variety of interesting textures and forms to the landscape, they are most notable for the color they provide. Plant simple mixtures of color. Color themes using related colors, such as red, orange and yellow (warm colors) or green, blue and purple (cool colors) work well. Warm-colored flowers bring excitement into the landscape and tend to appear close to the viewer, making the space in which they are planted feel smaller. Cool-colored flowers, however, appear more distant, creating a greater sense of garden space. Cool colors also tend to relax and soothe viewers.

Using shades of one color (including white) is also a popular and attractive theme. Another pleasing effect comes from using complementary colors — those colors found directly opposite each other on a color wheel — such as orange and blue or purple and yellow. These combinations form high color

contrasts and create a lot of excitement and interest in the landscape. Always be aware of surrounding or backdrop colors to achieve a coordinated overall design. The best way to set off annual flower colors and textures is to provide a simple backdrop of green vegetation.

Annuals are an excellent way to draw attention to building and home entrances, walkways and outdoor living spaces and to provide homeowners and visitors with pleasing "up-close" visual and fragrant experiences. Again, it is important to be selective in placing annuals so their ability to draw attention is not diluted.

Plant height is another important design consideration. Typically, a flower border has the tallest plants in the back, medium height plants in the middle and short plants in the front. An island planting places the tallest plants in the middle of the bed, surrounded by plants of decreasing heights.

The style of the annual bed should be compatible with the overall style of your landscape design. A planting can have either a formal or informal design, depending on the arrangement of the planting. Formal designs, for example, tend to be made up of geometric lines and symmetry, with strong focal points that attract the eye. In contrast, informal designs have curved, flowing lines and natural forms, follow natural terrain and create an asymmetrical balance within the planting.

Before planting, the physical characteristics of the site must be evaluated. Consider the site's soil type, fertility, drainage and its exposure to sun and wind. Compare site characteristics with specific plant requirements. (See NebGuide G84-739, *Annual Flowers for Nebraska*, for a listing and description of annuals grown successfully in Nebraska.) An annual plant adapted to site conditions grows and flowers more vigorously and has fewer pest problems. Some plants intolerant of heat and sun may perform adequately when planted in part shade.

Annual flowers offer flexibility in landscape design. Any planting can be changed each growing season, creating an entirely new design. As a part of their quick change potential, annuals can be used as a temporary solution in a problem site.

Seeds and Plants

Many annual flowers, such as marigolds, globe candytuft and zinnias, can be direct-seeded; that is, the seed is planted in the location in which it will grow all season. Others should be started indoors and transplanted outdoors at the appropriate time. Some annuals, such as larkspur, can be fall seeded. Growing seedlings indoors requires proper light and temperature, a pasteurized growing medium and several weeks of careful attention. Because it can be difficult to produce quality transplants at home, many gardeners are better off purchasing transplants. Flower transplants and vegetable transplants are produced using the same methods.

When selecting transplants, look for stocky plants with dense foliage and rich colors. Avoid seedlings that are leggy, yellowish or dry looking. If possible, check the root system. Most healthy plant roots are white; avoid purchasing plants with brown or black roots. While it is tempting to choose blooming plants, it is better to select those that are not.

Soil Preparation

Prepare an annual bed by digging or rototilling 8 to 12 inches deep. Amend the soil with organic matter, such as well-rotted manure, sphagnum peat moss, compost or leaf mold. Spread 1 or 2 inches of the organic matter over the soil and 1 to 2 pounds of fertilizer, such as 5-10-5, per 100 square feet of bed

and incorporate. Do not over-fertilize, which can cause excess foliage growth at the expense of flowers. Rake the bed smooth and remove any stones, clods or old plant debris before planting.

Direct-Seeding

Seeds of annual flowers vary in their hardiness and ability to germinate under certain soil temperatures. Hardy annuals can be direct-seeded in early spring. Do not seed tender annuals until the soil has warmed to 60° F. Once the planting bed has been prepared, make a shallow furrow for planting the seed (*Figure 1*). Read the seed packet for correct planting depth. Distribute the seed in the furrow and cover very lightly with soil or, if your soil tends to crust over, with a fine layer of vermiculite. Vermiculite will not crust over as soil often does and it allows better seedling establishment. Water the planting site with a fine mist to prevent washing away the seed. Keep the bed moist until the seeds germinate.



Figure 1. Recommended planting procedure.

Newspapers, boards or floating rowcovers can be placed over the planting site to maintain soil moisture. If using a board, place a brick under each end to keep the wood from resting directly on the ground, and remove it when germination begins. Decrease watering frequency as the seeds begin to germinate. Thin seedlings before they become crowded. Excess seedlings can be transplanted to other locations or shared with friends.

Planting Transplants

Although some annual plants tolerate cooler conditions, most should be planted outdoors only after danger of frost is past. Plant during the coolest part of the day, preferably when it is cloudy. Moisten plants before removing them from their containers. If roots are pot-bound, slightly tear the root ball to encourage spreading.

If you are using plantable peat pots, tear them to allow the roots to easily break through the sides. Also, tear off the top rim of the peat pot. This prevents the peat from being exposed to the air where it will act as a wick and draw moisture away from the soil ball, drying out the plant.



Figure 2. Most annuals respond to pinching.

Set the plants at the recommended spacing and cover them with soil to the depth of their container. Firm the soil around the roots and water immediately.

Most plants respond well to pinching at planting time. Pinching, or removing the early flowers, allows the plant's energy to be used to establish the plant rather than support flowers. Pinching also induces branching which will, eventually, increase the number of flowering stems. For best results, pinch out the first and second set of leaves (*Figure 2*).

Maintenance

Annual flowers generally require 1 to 1 1/2 inches of water each week. Be sure the water penetrates to the root zone. Generally, hand watering is not adequate to supply sufficient and uniform amounts of

water. Soaker hoses or sprinklers are more satisfactory watering methods. Soaker hoses are the most efficient because there is very little runoff, and evaporation and soil compaction are slight. Avoid overhead watering, particularly in the evening. Foliar diseases can be reduced by watering in early morning, rather than at night.

An annual flower planting may require additional fertilizer during the growing season. If the soil fertility is low, fertilize plants at a rate of 1/2 to 1 pound of 5-10-5 per 100 square feet every 4 to 6 weeks. Sprinkle the fertilizer lightly along the row and scratch it into the soil.

Although most weeds in home plantings can be adequately controlled with a combination of mulching and cultivation, herbicides are available for use in annual flower beds. Before spraying, read the label carefully to determine if the herbicide is safe for use on the plants you are growing.

Pinch off faded blooms at least weekly to stimulate blooming throughout the season. Trailing plants, such as fibrous begonia, petunias, pansies and coleus, can be pruned to keep the plants compact and stimulate additional blooming. Removing faded flowers prevents the plants from forming seed. As a result, they will bloom again in an effort to complete the life cycle.

Annual flowers have relatively few insect and disease problems. However, specific problems will characteristically develop on some plants. Maintaining vigorous growth, spacing plants so they receive good air circulation, planting in a site with good drainage and sun exposure suited to the plant will usually reduce disease problems. Quick identification of the problem and application of the proper insecticide or fungicide will minimize pest damage.

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