

# Seasonal Color...Care and Management

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## Using Color

Annual flowers can provide landscaped areas with more seasonal variety and colorful accents than most other plants. The key to success with annuals is to plant only the area that can be adequately cared for. Remember, color can have more impact on the landscape than any other design element. However, nothing has a more negative impact than a poorly maintained color area.

## Soil Preparation

Soil preparation is perhaps the most important aspect in maintaining seasonal color areas. This begins with the addition of large quantities of organic matter to obtain optimum aeration, drainage and water holding characteristics. Generally speaking, beds should consist of at least 50% organic matter for best results. In addition, bed areas should be raised to a minimum of 4-6 inches to avoid “drowning” during wet, rainy weather. Since organic matter can be difficult to re-wet after excessive drying, a wetting agent can be used to achieve uniform water distribution throughout the soil.

A soil analysis can be useful in determining the overall chemical characteristics of the medium. Most annuals and perennials prefer a pH in the range of 5.5-6.5 for optimum growth. This may require the addition of dolomitic lime to raise pH or sulfur to lower it. Your county extension office can provide additional details on how to collect and submit a soil sample for analysis.

## Adding Fertilizer

Fertilizer should also be incorporated into new beds. Select one where the ratio of N-P-K is 1:1:1 or 1:2:1 and apply according to label directions. Normal rate of application on new beds is generally 1 to 2 pounds per 100 square feet. On established beds, a soil test is recommended; normally, 1 pound per 100 square feet would be sufficient. Spade, rototill or otherwise mix well until uniform and level off.

## Pre-Plant Weed Control

To reduce weeding maintenance rototill one of the commercially available soil sterilants, such as Roundup, into the soil about three weeks before planting. Then just before or immediately after planting, apply a pre-emergent herbicide labeled for ornamental use, such as Treflan, and leave it undisturbed on the surface. (Refer to the chart on plant sensitivity to various pre-emergent herbicides.)

Other methods of weed prevention include the use of a physical barrier such as a film of black plastic which may be covered with a thin layer of decorative mulch. Be sure to punch numerous holes into the plastic with a garden rake to ensure adequate water penetration. Other weed barrier materials may also be used.

## When to Plant

Wait...don't try to jump the gun on planting! Most spring annuals can't be planted until after the danger of killing frost has passed; refer to the chart on hardiness for more details. Many warm season plants, such as periwinkles and caladiums, can not tolerate cool soil temperature. Delay planting until the medium reaches 70 degrees. Discard any plants that may have reseeded themselves from last season. They'll be less vigorous and may not resemble their hybrid parents. If it's not possible for you to plant right away, keep plants in a lightly shaded spot and be sure to water them as needed. If possible, it is best to plant on a cloudy or over cast day or late in the day to reduce transplanting shock.

## Handling Transplants

Just prior to planting, water the plants in their containers. Plants in peat pots should be soaked in a bucket for 10-15 minutes to ensure thorough wetting. Ideally, the garden bed should be moist, too. If the soil is dry, be certain to water the plants thoroughly, immediately after planting.

When planting time has come, mark the beds based on specified planting distance. Pack material is generally placed on 4-8 inch centers. Jumbo packs and 4-inch materials are most frequently planted on 12-14 inch centers. The spacing selected will be determined by species, plant size, time of year and cost.

Lift plants from cell packs or pots carefully, keeping the root ball intact. If the container is pliable, gently squeeze or push up the bottom of the container; otherwise turn it upside down to let the plant fall into your hand. If the plant does not slide out easily, tap the bottom of the container with a trowel. Moist plants are easier to remove from a container without disturbing the root ball. If roots are extremely compacted, loosen them gently before planting.

Occasionally you will find plants in a tray without individual cells. If this is the case, separate the plants gently by hand or with a knife. Do this just prior to planting so the roots don't dry out. For plants in individual peat pots, either peel most of the pot away or be sure the top of the pot is below soil level after planting.

## Planting

When planting, dig a hole slightly larger than the root ball, set the plant in place at the same level at which it was growing, and carefully firm soil around the roots. New plants will need to be watered well after planting and frequently thereafter until they are established and new growth has started.

An application of soluble fertilizer, high in phosphorus, should be made after planting. A fertilizer such as 20-10-20 mixed at the rate of 0.5 pounds per 100 gallons of water will cover 400 square feet. Do not apply fertilizer to dry soil.

## Mulching

Adding a 2- to 3-inch layer of mulch is optional-but it does add a decorative "finished" look as it reduces weeds and conserves soil moisture for better growth. The best mulches are organic, such as bark chips, pine needles, shredded leaves, peat moss or hulls. The following year, mix in the mulch to enrich the soil before planting.

Additional mulch can be added each spring, improving soil structure as years pass. Apply additional high nitrogen fertilizer such as ammonium nitrate at the rate of 1 to 2 pounds per 100 square feet when adding fresh mulch. This will compensate for the nitrogen used during decomposition of the mulch.

You can mechanize planting thousands of annuals along driveways and walks with a large scale "plant dibbler". Have appropriate size dibbles (about the size and shape of an inverted styrofoam coffee cup) welded to an empty turf roller or the wheel of a hand-operated cultivator.

## Mass Plantings

Mark spacing intervals on a large piece of paper; wrap it around the roller and transfer the interval markings to the roller as a guide for the welder. For interchangeable spacing requirements, weld the dibbles to cylindrical sleeves that slip around the roller- a different sleeve for each spacing need.

To speed up the hand planting process, position the “planters” on a very slow moving tractor-towed platform as has been developed for similar requirements in commercial agriculture.

## Fertilizing

Most annuals do not require high levels of fertilizer, but will do much better if adequate nutrients are available. Application of a 1:2:1 ratio fertilizer once or twice during the growing season is recommended. A rate of 1 to 2 pounds per 100 square feet is sufficient. As an alternative, you may use a soluble fertilizer such as 20-20-20 mixed at a rate of 1 pound per 100 gallons and applied every three to six weeks.

Too much fertilizer can cause a build-up of soluble salts in the media which can damage plant roots. Check soluble salt levels regularly to make sure you are not overfertilizing. Your county extension agent or grower can tell you how.

## Watering

Deep, infrequent watering is generally better than frequent, light watering, since the former encourages deep root growth. Don't allow plants to remain for extended periods in puddles of standing water. This situation encourages root diseases and overwatering symptoms such as yellow leaves.

Water annuals about as often as turf. Refer to the individual plant descriptions to see which plants like more or less moisture than average. When annuals need less water than the surrounding turf, using raised flower beds will improve drainage and reduce the chance of overwatering.

Foliage should be kept dry if at all possible during watering. Soaker hoses work best. However, if you must use overhead sprinklers, water disease-prone annuals (zinnias, calendula, grandiflora petunias and stock in particular) as early as possible in the day so the foliage will dry off before night, lessening the chance of disease.

Professionals have been very innovative in creating “mechanized” watering equipment. Water tank trucks can be adapted from used vehicles available from fire departments or from fuel oil distributors. (Be sure to thoroughly clean the interior of fuel tanks before use.)

## Manicuring

Many annuals, chiefly begonias, impatiens, coleus, alyssum, ageratum, lobelia, vinca, salvia and others, require little additional care. Their flowers fall cleanly from the plant after fading and do not need to be manually removed.

Others, such as marigolds, geraniums, zinnias, calendula and dahlias will need to have faded flowers removed. This is known as “deadheading” and not only keeps plants attractive but also discourages disease and keeps plants from going to seed so the plants will produce more flowers and look tidier. Deadheading can be done with pruning shears or sometimes with the fingers.

A few annuals, primarily petunias, snapdragons and pansies, may need to be pinched back after planting or after the first flush of bloom to keep them compact and freely flowering. As new hybrids are created, this is becoming less of a maintenance requirement.

Annuals are generally trouble free under proper cultural conditions. However, there are some common pests to be on the lookout for.

**Diseases** Plant disease-prone species (zinnias, calendula, grandiflora petunias and stock) where air circulation is good, and keep the foliage dry. When this can't be done, fungicide treatment may be necessary.

## **Insects**

The most common are aphids, white fly or spider mites which are easily controlled by various pesticides. Mites and white fly are less of a problem when plants are frequently watered. High temperatures increase insect populations necessitating more frequent pesticide treatment. Use extreme caution with pesticides. Be sure to READ THE LABEL before use.

Slugs and Snails- These pests can feast on young bedding plants, especially marigolds, petunias and salvia. Place slug bait near new plantings in late afternoon and replenish as needed. Take care to prevent children or wild or domestic animals from eating bait.

## **Weeds**

Weeds may appear, even though you used mulch and pre-emergent herbicide. Be sure to remove weeds as soon as possible so they do not compete for water and nutrients. Remove them carefully especially when the annuals are young, so as not to disturb their roots.

## **Color Rotation**

In most of Texas and the southwest, color areas can be changed out 2-3 times per year. Spring planted annuals are usually set out from late February through the first of June. A second planting of heat tolerant annuals, such as verbena, periwinkle or portulaca, is frequently used from June through the hot summer months. Fall planted annuals, like pansies and dianthus, are generally set out when temperatures begin to cool off in late September-October. Managing color change outs is an important part of keeping plant materials looking their best.

**Recommended Varieties** Selecting a well adapted variety is the most critical element for success with seasonal color in the landscape. There are literally hundreds of varieties available but few will thrive in our stressful environment. Be sure to consult your county extension office for current recommendations.

## Fall planted, spring flowering annuals\*

<b>Plant</b>	<b>Height Inches</b>	<b>Spread Inches</b>	<b>Exposure</b>	<b>Comments</b>
Calendula	10-24	10-24	Sun	Tender in north Texas, attractive cut flowers
Flowering Kale	12	12	Sun	Ornamental foliage, very hardy, edible
Flowering Cabbage	12	12	Sun	Ornamental foliage, very hardy, edible
Nasturtium	12	24	Sun	Do not over fertilize, needs good drainage
Pansy	10	15	Sun	Hardy, wide color range
Dianthus	10	12	Sun	Single carnation, bright colors, hardy
Larkspur	6-30	6-24	Sun	Good for masses of color
California Poppy	12	10	Sun	Attractive cut flowers, can be direct seeded
Iceland Poppy	12	10	Sun	Attractive cut flowers, can be direct seeded
Snapdragon	6-36	2-24	Sun	Many varieties and colors
Sweet Peas	vine	vine	Sun	Fragrant, good cut flowers
Stock	15-30	12-24	Sun	Spike flowers
Torenia	12	12	Sun	Limited adaptability
Viola	10	12	Sun	Excellent small flowered annual

## Spring planted, summer flowering annuals

<b>Plant</b>	<b>Height Inches</b>	<b>Spread Inches</b>	<b>Exposure</b>	<b>Comments</b>
Alyssum	4-8	12-24	Sun	Fragrant, withstands frost
Amaranthus	48	30	Sun	Brilliant foliage
Bachelor Button	12-24	12-24	Sun	Attractive cut or dried flowers
Begonia	6-15	8-15	Shade	Attractive foliage and flowers
Caladium	12-18	15-18	Shade	Bright foliage, plant from tubers
Cockscomb	12-36	10-30	Sun	Crested and plume types available
Coleus	8-24	12-24	Shade	Colorful foliage
Copper Plant	36	30	Sun	Brilliant copper colored foliage
Geranium	12-24	12-24	Shade	Needs shade during summer months
Impatiens	6-24	10-24	Shade	Brightly colored flowers, many varieties
Lantana	12-48	30-48	Sun	Trailing and upright forms, many colors
Marigold	6-36	10-36	Sun	Spider mites a problem, holds up in heat
Periwinkle	12-24	12-24	Sun	Excellent heat tolerant selection
Petunia	8-12	12-24	Sun	Many varieties, will hold up against frost
Portulaca	12	12-18	Sun	Excellent heat tolerance
Salvia	8-18	8-18	Shade	Needs shade during summer months
Verbena	6-12	12-24	Sun	Excellent heat tolerant selection
Zinnia	6-36	6-36	Sun	Many colors, heat resistant

\*This list represents the most commonly used annuals.