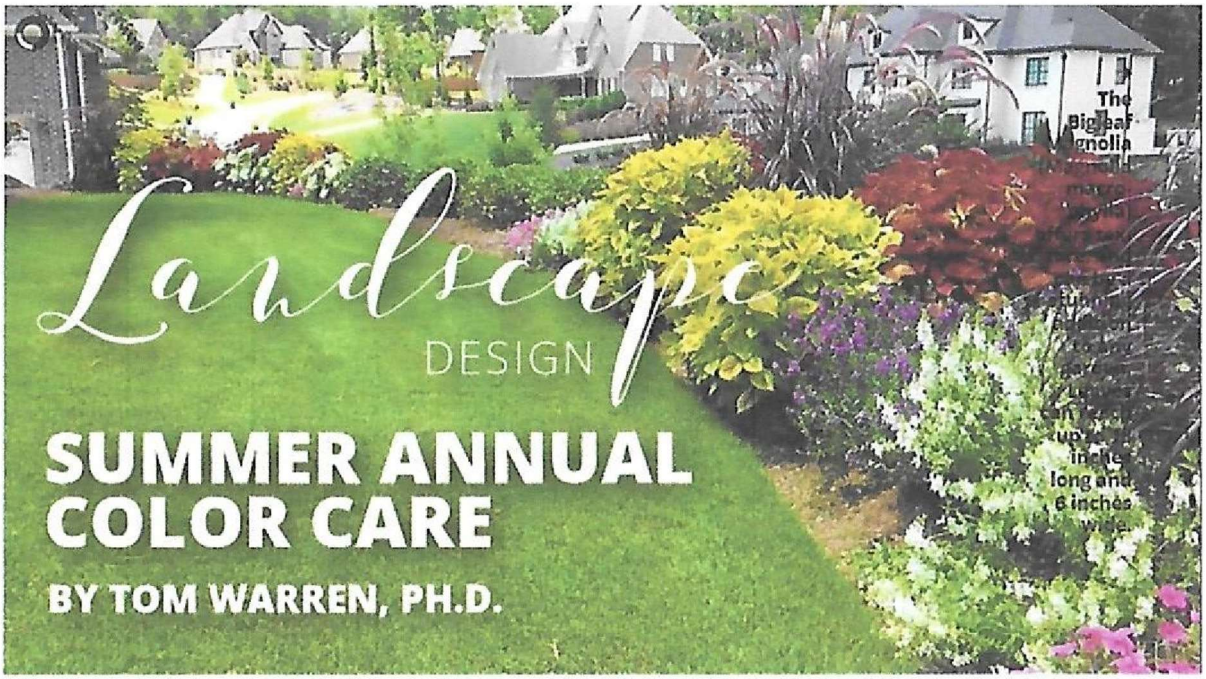


Landscape DESIGN

SUMMER ANNUAL COLOR CARE

BY TOM WARREN, PH.D.

Whether you are a new gardener or an experienced veteran, starting a summer annual color project can be equal parts exhilarating and daunting. The key to being successful is to have a small amount of base knowledge about the needs of these plants and the ability to ask questions ahead of potential issues.

Annual color has the ability to bring out the best in any landscape. After a long winter, with limited color available for the landscape, each spring provides an endless bounty of plant colors, growth habits and textures to enhance any outdoor setting. From full sun to full shade, there is a plethora of plant choices. These enhancements include framing front entrances, bringing interest to a secluded border, providing refuge to wildlife or adding color to containers used in sitting areas.

Getting the most out of your summer annuals can be tricky at times. Improper soil media, water and sun requirements, a lack of nutrition or insects and pathogens can bring havoc to any well-planned annual color bed. Other concerns may include:

- What plants go well together in terms of nutrition and sun requirements?
- Will the annuals I plant together complement each other?
- Will one species grow so large that the others are not visible?

For many of us, the entire point of gardening is to create a beautiful setting. From vibrant reds that can excite to cool blues that can soothe, annuals can play a vital role in the elegance of any landscape.

Incorporating the correct growing media is imperative to the successful growing of annuals. Typically, annuals can survive in native soils, but will not thrive in native soils. Growing media will give annuals the correct balance of

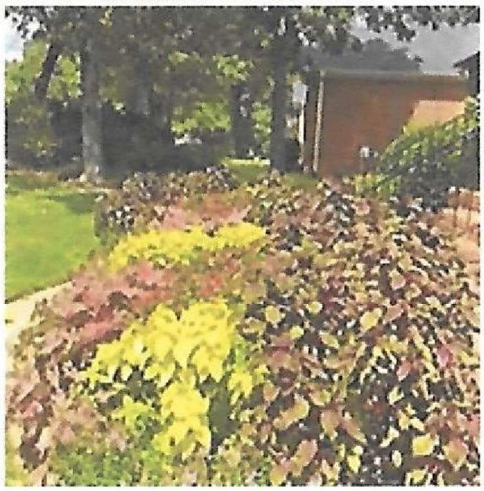
> ***"Incorporating the correct growing media is imperative to the successful growing of annuals."***

◀ A mixed annual border gives delineation between a turf area and wall at a private residence in Birmingham, Ala.

water retention, nutrient uptake and root air movement. The ideal growing media consists of a uniform mix of peat moss, sand, vermiculite and aged amended pine bark. A quality mixture will consist of one part peat moss, one part sand, one part vermiculite and two parts amended pine bark by volume mixed thoroughly. Soilless media can be made at home or purchased by the bag at a local garden center. When constructing an annual color bed, the bed should be built up with 6-to-8 inches of media.

After incorporating the correct growing media, there are a few parameters that must be met to have season-long success with your annual color. The first and most important is water. Most summer annuals require 1-to-2 inches of water per week. Too little water and we begin to see wilting or death. Too much water can lead to unwanted diseases such as Pythium root rot. A good rule of thumb is to check the soil moisture level the annuals are planted in. If the soil is dry one inch below the surface, it is probably time to water. If it has been 24 hours since the last watering and the soil is saturated one inch below the surface, the plants are probably receiving too much water. If the plants are under automatic irrigation, the plants typically should receive a quarter-to-a half inch of water every other day. If the plants are in direct sun and exposed to hot temperatures, watering frequency may need to be increased to every day.

▼ A mixed annual color bed of purple salvia and dusty miller at a private residence in Gadsden, Ala.



▲ A mixed annual bed of sun coleus, dragon wing begonia, caladium and sweet potato vine at a private residence in Albertville, Ala.

The second requirement is nutrition. To grow full, mature plants with lots of flowers, we must provide the correct nutrients, in the right amount, at the right time. When planting summer annuals after the threat of frost, it is recommended to incorporate a slow-release fertilizer into the media. I typically recommend Harrell's 17-5-11 slow release with micronutrient. This initial fertilization provides four-to-six months of nutrients to the plant. This fertilizer will put out at a rate of 15-to-20 pounds per 1,000 square feet. About two weeks after planting, apply a liquid drench of fulvic acid and 9-3-6 liquid fertilizer. For fulvic acid, I recommend Harrell's Bio-Max Root Enhancer Plus at a dilution rate of 200 ounces of product/100 gallons of water. For the liquid fertilizer, I recommend a dilution rate of 64 ounces of product/100 gallons of water. Sometime during early summer, around the first of June, I recommend introducing micronutrient fertilization. I

Mixed containers of annual color at a private residence in Rome, Ga.

recommend Harrell's Minors at a rate of 3 quarts of product/100 gallons of water. The micronutrients will help ensure plant vigor and health throughout the growing season.

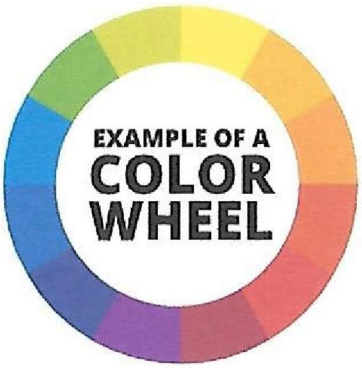
The third requirement is insect and fungus control. In most cases, this parameter tends to be the less labor-intensive element for growing quality annuals. Organic controls such as diatomaceous earth and neem oil can provide protections against insects as well. Another organic insect control is the use of predatory insects, also known as beneficial insects. For example, the introduction of ladybugs can help reduce aphid populations. Many predatory insects can be purchased and introduced to the landscape.

The fourth requirement is the amount of sun a plant needs to thrive. We can divide sun requirements into three categories: full shade, part sun and full sun. Full shade can be defined as four hours or less of direct sunlight every day. Part sun can be defined as four-to-eight hours of direct sun per day. Full sun can be defined as eight hours or more of direct sun per day. All annuals will fall into one of these three categories. Placing full-shade plants in a full-sun area will result in your annuals having a "burned" look. Likewise, placing full-sun plants in a full-shade area will result in "leggy-looking" plants. Both actions may result in the death of the plants. Most growers of annuals provide an informational tag with the purchase of the plant material. These tags offer sun requirements for the given species, as well as other general care information. Before planting in an area, carefully

"Placing full-shade plants in a full-sun area will result in your annuals having a "burned" look."

A mixed annual color bed of black knight elephant ears, red coleus and dragon wing begonia at a private residence in Birmingham, Ala.

observe the amount of time the area receives direct sunlight. This will be critical to ensure the plants you select will be able to survive. Plants that do well in full sun include petunia, ageratum, salvia, zinnia, marigold and geranium. Plants that do well in part sun include ageratum, lobelia, salvia, begonia, coleus and impatiens. Plants that do well in full shade include coleus, begonia, fuchsia, impatiens and bacopa. It is important to note that some plant species can survive in multiple sun requirements. For example, begonias can do well in part sun (four-to-eight hours of sun per day) and in full shade (four hours or less of sun per day).



A final issue to consider is what plants go well together in terms of color. Traditionally, I prefer to use complimentary colors. Complimentary colors are those colors that are across from each other on the color wheel. For example, one of my favorite color combinations to use is yellow and purple. Other color combinations that work well together are orange and blue, red and light green. White goes with any color. If I ever find myself having a difficult time matching up complimentary colors, I know that I can use white as a substitute and pull off the look that I am going for. One of my favorite combinations of annuals to use in a part-sun environment is dragon wing begonias,

A quick reference chart to assist in the correct monitoring and application of nutrients.

DATE	PRODUCT TO APPLY	RATE
April *(or after last frost)*	Material to be planted	Space according to grower recommendation
	Slow release fertilizer with micronutrients	20 pounds/1000 square feet or manufacturers recommendation
May	Fulvic Acid	200 ounces/100 gallons or manufacturers recommendation
	Liquid fertilizer	9-3-6 64 ounces/100 gallons or manufacturers recommendation
June	Micronutrient package	3 quarts/100 gallons or manufacturers recommendation
July	Liquid fertilizer	Apply only if needed. If growth is satisfactory, then do nothing.
August	Liquid fertilizer	Apply only if needed. If growth is satisfactory, then do nothing.
September-November		Remove annual color after first frost.

coleus, white caladiums and black magic elephant ears. This creates a striking contrast and also provides a myriad of heights and textures. One of my favorite full-sun plantings is purple wave petunias in combination with yellow lantana, marigolds or coreopsis. Purple and yellow play well off each other, and the different heights and textures of the different cultivars provide lots of options when selecting plant material. Another striking full-sun application is the use of purple fountain grass with lime-green sun coleus. This combination offers complimentary colors and provides dramatic changes in terms of texture. If you implement any of the above in your garden, it will be the envy of any neighborhood! ■

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Photos by Josh Phillips

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According to the Center for Biological Diversity, monarchs have declined by more than 80 percent over the past two decades. Nearly a billion monarch butterflies have vanished since 1990, according to data released by the U.S. Fish and Wildlife Service in early 2015. ■

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A rededication for the newly named Sensory Butterfly Garden was held on May 5. Photos by Jennifer Condo.

Plants are standing by for planting in the refurbished garden. Photo by Sharon Causey.

Garden project volunteers Jim West (far right), who designed plans for the butterfly garden area, and John Hatfield, were instrumental in helping the project come to fruition. More than 1,000 butterfly-friendly plants were planted in the garden, including butterfly host and larval plants, such as milkweed, passion vine, cassia, Dutchman's pipe, parsley, dill, fennel and penta. An abundance of nectar plants also were added that include lantana, buddleia, porterweed, salvia, firebush, daylily, vinca, Mexican sunflower, impatiens and more. Photos by Sara Kearney and Sharon Causey.

For more information, visit http://monarchcityusa.com/