Spring annuals for the landscape

Improved annuals have more color, uniformity and disease resistance. Your biggest concern is proper plant selection.

by Dr. Lois Berg Stack, extension specialist, University of Maine

In the past 40 years, since the introduction of F1 hybrids revolutionized the bedding plant industry, thousands of improved annual flowers have been introduced. Each year, annuals offer more color, greater uniformity, increased disease resistance, enhanced durability, improved growth habit and better garden performance.

The first step in creating effective and productive annual flower gardens is good plant selection. Whether you are looking for old reliables or new introductions, you can narrow the options by following these few simple rules:

1. Match the plants to the environment. There are flowers for every location, wet or dry, sunny or shady—but there is no single annual that will adapt to every environment.

2. Choose plants that look good all season. Some annuals stop flowering in the heat of midsummer. Others are naturally short-lived. Annuals vary by species (petunias vs. marigolds, for example), but cultivars within a single species also vary ('Apricot Brandy' vs. 'Red Fox' celosia, for example). Where can you see annuals in real-life situations, in order to assess which ones will perfom best? Visit public gardens, check out university and commercial trial gardens, ask other landscape professionals ask the greenhouse growers.

(Table 1 lists some annuals that adapt well and perform in a variety of environments, and under a broad range of cultural management levels.)

3. Select low-maintenance annuals. "Low-maintenance" is a relative term when applied to annual bedding plants, since the process of planting each year is a high-maintenance task.

"Low maintenance annuals" do not require frequent pesticide application, deadheading (removal of old flowers to



The Zinnia elegans. Zinnias can be seeded directly into gardens after frost.

promote development of new ones) or other time-consuming procedures.

Don't skimp on quality—Evaluate plant quality by looking for good green color, lack of insect and disease problems, good flower bud count (in flowering annuals), healthy root systems, thriftiness and uniformity. When any of these traits are missing, you may not be able to tell exactly what went wrong, but you know that one or more stresses were at work. A stressed plant will never achieve its full potential, and if you can't tell what the stress was, it



The silver-leafed "Dusty Miller" requires full sun, but little maintenance.

will be difficult to compensate for it after the plants are in the landscape.

Growers who produce high quality plants can provide an extra service: they can recommend colorful, high performance, low maintenance annuals for specific sites. They can even give you a projected maintenance schedule. Take advantage of the grower's knowledge resource.

The lowest-priced annuals are not always the best buy. Consider the relationship among quality, price and value. A high-quality bedding plant is worth more than a low quality one, because it will perform better. A high-quality plant requires more input (control of the production environment, pest management, proper fertilizer application, etc.), and hence may legitimately cost more money. But if that investment of additional cents per plant pays off in higher performance in the landscape, then the investment is a good one.

Planting tips—Here are some tips for planting annuals in the spring:

 Pinch back leggy seedlings at planting time. Petunias often become a bit leggy in the greenhouse. If pinched back at planting time, they may take a bit longer to flower, but they will branch more and give more color in the long run.

• If you apply a pre-emergence herbicide before planting a flower bed, rototill and rake out the bed, apply the granules and rake in lightly. Plant the young seedlings through the layer of soil containing herbicide granules, making sure the root ball penetrates slightly below the herbicide layer. Many transplants suffer root

CONSIDER SOIL QUALITY

Temperature Texture Drainage

Moisture levels Nutrient levels pH

CONSIDER TEMPERATURE

Daily fluctuation Spring and fall frost dates Proximity to temperature-altering objects such as buildings or bodies of water Light intensity, day length and reflection Precipitation: amount and regularity throughout the growing season

Wind and weed problems

TABLE 1

20 HIGH-PERFORMANCE SPRING ANNUALS FOR 1992

Full sun (Require minimal maintenance) Canna x generalis ("Canna") Catharanthus roseus ("Periwinkle") Cleome hasslerana ("Spider Flower") Dyssodia tenuiloba ("Dahlberg Daisy") Gaillardia pulchella ("Annual Blanket Flower") Petunia x hydrida ("Petunia") Salvia farinacea ("Mealycup Sage") Sanvitalia procumbens ("Creeping Zinnia") Senecio cineraria ("Dusty Miller") Zinnia angustifolia ("Narrow-leaved Zinnia")	"Tropical Rose," 3 feet tall; grow from seed "Cooler" series and "Pretty in Rose" 1.5 to 2-feet White, pink, lavender; 4 feet Free-flowering yellow daisy; 6 to 8 feet "Red Plume" needs deadheading Multiflora types best for mass planting "Victoria" is 24 feet tall; vibrant blue flowers Drought-tolerant; 8-inch spread All of the silver-leaved variety are excellent "White Star" the talk of 1991 trials
Novelty plants (Have a unique appearance) Capsicum annum ("Ornamental Pepper") Ocimum basilicum ("Sweet Basil") Pelargonlum species ("Scented Geraniums") Salvia virdis (no common name) Verbena x hydrida ("Verbena")	6-12 feet plants valued for colored fruits Try 'Spicy Globe' (10-inch mound) or 'Purple Ruffles' (12-inch purple leaves) Many types, 12 to 30 inches tall; plant where pedestrians can appreciate An 18-inch plant with blue, pink or white top leaves 'Peaches & Cream' is an 18-inch plant with pastel flowers
Shade plants (These annuals complement impatiens gardens) Begonia x semperflorens-cultorum ("Wax Begonia") Begonia x tuberhybrida ("Tuberous Begonia") Lobularia x maritima ("Sweet Alyssum") Nicotiana alata ("Flowering Tobacco") Viola x wittrockiana ("Pansy")	 10-12 inches tall; do well in shade; many do well in partly sunny areas 'Nonstop' and 'Nonstop Ornament' are 12 to 18 inches tall; vivid warm colors 4-10 inch spreading plants; sweet-scented flowers 18-30 inch upright plants; vibrant pink, white, red or green flowers 8-10 inches; most newer types flower all season, despite heat

Source: Dr. Lois Berg Stack

damage when new roots grow into the soil layer containing herbicide granules.

• When planting annual seedlings, remove plants from their containers even if the containers are peat or fiber. Until these degradable pots break down, they restrict young root growth. Be sure to cover the entire root ball with soil, particularly if the plants were grown in a peat-lite mix. These soiles mixes dry out more quickly than the surrounding native soil. Leaving the top of the root balls exposed at soil surface will dry out and stress young plants.

• For better root development, allow young annuals to become established for a few weeks before mulching. Do not apply mulches in the spring, as they cool the soil, which inhibits rapid plant development. Allow the seedlings to develop for a few weeks, then weed, water and mulch.

 Some annuals can be sown directly in the flower bed with excellent results.

Sweet alyssum, a low-growing edging plant, can be seeded into the garden in early spring, and will provide good color all season. Moss rose, another edging plant, develops very quickly from seed. Sow the seed after frost danger has passed.

Dwarf French marigolds can be seeded directly into the garden, producing flowers in 8 to 10 weeks. Zinnia seedlings often become quite leggy in the spring greenhouse, but when they develop quickly in the heat of summer, they are much stockier. A strong, well-branched, healthy crop of zinnias can be grown by seeding directly into the garden after all danger of frost.

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