

## **A WORD OR TWO ABOUT GARDENING**

### **Making up your flower bed**

During a South Florida summer only a limited number of plants are reliable for use in annual flowerbeds. Maybe this is just as well, since I suspect that most of us try to restrict the amount of time we need to spend in the yard at that time of year. With the onset of fall however, conditions outdoors are less taxing and we can give full reign to our creative gardening talents. Coincidentally, this is when garden centers begin to stock up on a range of colorful flowering bedding plants that will flourish in our mild winter climate. Many of these are used farther north as summer annuals, but are ours to enjoy through the holiday season, and beyond, often into the early part of the succeeding summer.

Before discussing what to grow, and how to proceed, let's first clarify the plant types most often used as flowering bedding plants. Annuals are most frequently employed: they flower (and set seed) within one year after seed is sown, and then die (e.g. cockscomb or zinnias). Perennials can last 3 or more years, but many of those used as bedding plants usually only succeed for one season under South Florida conditions (e.g. geraniums, or Gerbera daisies). There are several bedding plants that grow from corms or bulbs that are extremely colorful, but for the purpose of this article I will consider only those propagated from seed or cuttings.

In deciding which bedding plants you wish to grow, there are a number of factors to be considered: container or in ground; seed grown or transplants; sun exposure; water requirements; degree of maintenance; color scheme and longevity in the landscape. As was pointed out in a previous article on growing vegetables in Miami-Dade, it is much easier to grow bedding plants in a raised bed rather than attempting to break up the limestone found in much of the county. For those on marl, raised beds will offer improved drainage. Many flowering bedding plants are ideal for planters - begonias, zonal pelargoniums (commonly but incorrectly referred to as geraniums), kalanchoes and pot marigolds (calendula). If you decide to plant directly in the ground prepare your planting beds well in advance adding organic matter, coarse sand and/or Perlite to produce an enriched but free draining soil. Local garden centers offer soil mixes specifically blended for vegetables and annuals.

Some bedding plants are fairly simple to grow from seed, and in the case of marigolds, phlox (needs cool temperatures to germinate), sunflowers, snapdragons and zinnias can be sown directly outdoors. Thin out the seedlings as they develop to provide appropriate spacing. Seed tapes (strips of biodegradable tape containing regularly spaced seeds) can simplify seeding. Those plants with fine seed, such as petunias, Persian violets (exacum), wax begonias and impatiens can be difficult to sow, (the latter two are also erratic with respect to germination), and transplants are more reliable. If you do raise these latter plants from seed, start them indoors in containers (usually seed flats). Carefully mix the seeds with a small amount of fine sand using a saltshaker to sprinkle them over the surface of a moistened, soilless growing mix that is formulated for seeds. Do not cover with more soil.

Larger seeds should be planted at a depth no more than the size of the seed – most seeds fail as a result of being planted too deep or because of too much or too little soil moisture. A few seeds (delphiniums, gazanias and phlox) require darkness in order to germinate, and the flat can be covered with aluminum foil.

Maintain soil moisture by watering from the bottom, or place the seed flat/container in a plastic bag (look for condensation) until the seeds germinate. Seed starter kits simplify matters, are relatively inexpensive, and available from many mail order garden supply companies. Once the cotyledons (juvenile leaves) emerge increase light exposure. Carefully transplant seedlings to 2 –3' peat or plastic pots as the first true leaves develop. Growing from seed requires more effort and patience, but offers flowers in a far greater range of shades and tints than is available from garden center transplants. Some seeds, for instance pelargoniums, are relatively expensive, but it may be the only way to obtain a specific cultivar.

Transplants, although more expensive and offering less variety than seeds, are the quickest and most reliable way to establish a flowerbed. Before planting, the root ball should be carefully teased open since transplants are often root bound. Incorporate a slow release fertilizer (e.g. about 4lbs/100 sq ft of a 14/14/14) into the top 3-4" of soil, and position the plant in the prepared soil bed at the same level it was in the growing container. Carefully water around the base of each transplant using a wand type breaker nozzle. In order to avoid potential disease problems, it is important not to allow soil to cover the crown of plants that have leaves growing as a rosette on the soil surface, such as gerberas and statice (Limonium). To prevent future weed problems, a pre-emergent herbicide can be sprinkled around the transplants after they are set out and lightly watered into the soil (read the label to make sure it is compatible with the bedding plants you install). Be careful when using mulch not to interfere with air circulation around the base of the plant. Rather than the usual 3", a 1" covering of mulch is sufficient, keeping it well away from the stems of individual plants.

Most flowering annuals require full sun, though some can grow in light shade: impatiens can be planted in full sun as a winter bedding plant in South Florida. However it is better to provide some shifting dappled shade. As summer approaches impatiens requires increased shade, otherwise it will wilt without daily watering. Browalia, Persian violet, gerbera daisies, scarlet sage and wax begonias (bronze-leaved hybrids are most tolerant of full sun) can tolerate some light shade, more substantial shade in the case of browalia and Persian violets. Flowering annuals such as nasturtiums, lobelia, pansies and stock require cool temperatures to flower, and the mild winter temperatures in Miami-Dade can severely limit flower production.

Water use is an important consideration – group plants with similar water requirements together. A micro-irrigation system that delivers water directly to the root system is ideal, or hand watering around the base of the plant. Mulching can help reduce loss of soil moisture. Overhead watering (e.g. lawn sprinklers) can damage some plants, such as petunias, and is often left on too long for bedding plants, leading to disease problems. Water that is too warm or cold can damage flowers – with impatiens this results in white ringspots on the petals. At the other extreme, do not allow bedding plants to wilt as this can cause leaves to drop (e.g.

pelargoniums), and adversely affects flowering. Impatiens require frequent watering, more so as temperatures climb and shade is absent. They are also prone to several root and stem rots if the soil is over watered.

There are bedding plants to suit whatever color scheme you require, with familiar plants such as geraniums, impatiens and petunias available in both pastel shades and more vibrant, richer colors. These and other bedding plants are available in mixes: chancy in that you don't always know which exact colors are present, but useful if you want a range of colors in a limited space. With a larger bed solid blocks of color can be used, the effect being more arresting if no more than three or four colors are used. The easiest approach is to use complementary colors, such as shades or tints of yellow and purple or orange and blue. If you feel more adventurous try using colors that are adjacent on the color spectrum, such as bright yellow, orange and deep red. White flowers are useful in that they harmonize with any color, and can be interspersed between blocks of color, or as a border to frame an entire bed.

Apart from water requirements, plants differ in the degree of maintenance required. Fertilizer should be used sparingly, as too much will reduce flower production – this is especially so for salvias, phlox, begonias and dianthus. Where mulch or a pre-emergent herbicide has not been used, weeds should be removed as soon as possible – certainly before they go to seed. In order to ensure continuous flower production deadhead (remove spent flowers), especially for heliotrope, marigolds, pelargoniums, petunias, and zinnias. Petunias tend to become leggy as the season progresses and should be cut back to rejuvenate them and improve flower production.

When planning your flower garden, pay attention to how long a given plant should last. The planting season in Miami-Dade lasts from October (early) through January (mid) to March (late), with all but a few plants finished by July to August. Alyssum, petunias and statice for instance are planted early to mid season and will probably be finished by May, whereas wax begonias, browalia and gaillardia can be planted early to late season and may well last well into August. Short lived early season plants (e.g. carnations) will need to be replaced with those that will withstand higher temperatures and last further into the season (e.g. heliotrope or verbena). Try some of the heat tolerant varieties of annuals that normally prefer mild temperatures such as petunias, (e.g. 'Tidal Wave'). Plants that have a comparatively short period of flowering (i.e. moss rose) should be planted in succession (new transplants or seeds planted at intervals over the season).

Impatiens has many positive features, and can be especially impressive massed in large flowerbeds. Unfortunately most local plantings have a predictable uniformity, with the same basic red, pink and white color combinations being used. There are more than 100 different varieties of impatiens, including the newer stunning double flowered cultivars. However, if you are looking for a more extensive color palette, then you will probably have to grow from seed. A more serious problem is the need for frequent watering if the plants are not to languish. The tetraploid Bruno series is supposed to be more tolerant of sun, but there appears to be little information on how they perform in South Florida.

Wax begonias are a useful substitute for impatiens, requiring much less water and with a longer season. They are available in single, semi- double and

double flowering cultivars, in bright shades of red, pink orange as well as pastels, with some bi-colored and picotees. On occasion begonias may last through the summer, though flowering will be much reduced and the plants often leggy. If they survive, try cutting them back in the fall to encourage branching and stimulate renewed flowering.

Other water-wise choices include, Dahlberg daisy (early to mid season), salvias (early to late), gaura (mid – late), statice (sea lavender, early to mid), moss rose (late), verbena (mid to late season) and galliardia (blanket flower). The accompanying photograph shows the latter plant in a local landscape. Pink gaura (available as transplants) is an attractive airy perennial, tolerant of drought and poor soil. Heliotrope, although not as drought tolerant, is adapted to full sun (some afternoon shade from late spring is beneficial). This old-time favorite, currently under utilized in the landscape, is available as seed and transplants ('Nagano' or 'Atlantis' are compact 12-14" cultivars with clusters of fragrant purple/blue flowers). Although these latter two plants are perennial, both eventually succumb to our wet, humid summers. It is then time to set out the balsam, crossandra and torenia (wishbone flowers), along with more zinnias and marigolds. After the above few words about some transient visitors to the landscape, the next article will concern somewhat more permanent landscape specimens - some neat little trees.

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**Gaillardia (blanket flower) 'Goblin' grown from seed (late May, Homestead)**