

# Revive soil for best warm-season color

*Take time to evaluate planting conditions before you rush into change-outs into warm-season soils.*

by LEAH ROTTKE

**C**olor beds are the hardest working soils in the landscape. Every few weeks they are stripped of the plant material, beefed up with amendments and fertilizer, replanted and unveiled for close scrutiny, with professional reputations resting on each new planting.

Only regular farming of truck crops makes such intensive use of the soil. Follow an equally intense program of site preparation, installation and maintenance to keep these soils from "burning out". A race car pit crew probably has more time on their hands that crews that change out color beds! But time well spent in the "pit stop"

pays off in the long run, in crisper, lasting, low maintenance plantings.

#### **Organic matter essential**

Herbaceous color set out just inches on center is especially dependent on adequate organics in soils.

Southeastern soils tend to deplete heir supply of humus rapidly due to hot, humid summers that speed decomposition, and rainfall, which leaches the soil.

Southwestern soils are typically poor in organic matter because arid climates slow the formation of humus. Monitor the organic content of the root zone at every changeout. Amend to keep the level of organic matter close to one third of the soil volume. For example, if the root zone is six inches deep, two inches of it needs to be organic matter (compost, peat, rotted manure).

#### **Moist bed, plants well watered**

1. The prepared bed should be damp, not wet, at installation time.
2. The plants to be set out must be well

watered. Dry plants put into dry soil will not root out, regardless of subsequent irrigation.

3. Water the bed immediately after installation, or every 200 sq. ft. for large areas.

4. Only turf has plants closer on center with a shallower root zone than does a color planting. The first one to two weeks is a critical period, and the new plants must be kept moist at all times to speed rooting.

5. Irrigation can be modified to a more deep, infrequent style after this. Early morning is the choice time; it allows the foliage to dry off in the cool of the day, which avoids mildew and sunscald.

#### **Insect/disease control**

Densely packed monocultures—or designs using three or less plant species—are more prone to damage from insects and diseases.

Vigorous plants in a vital, well-irrigated soil is a good first line of defense.



Cape Marigolds close at night and in overcast conditions. They bloom freely in sun, heat, drought and alkaline soils.

## Six for the south (and southwest)



Cape Marigold

**Diormorphotheca sinuata, Cape Marigold:** 12 inches high, with two-inch daisy-like blooms that close at night and in overcast conditions. Flower from orange to creamy yellow on the same plant. Needs good drainage, but blooms freely in sun, heat, drought and alkaline soils.

**Cosmos bipinnata, Cosmos:** Plants are three to five feet tall, blooms are three to five inches across. Mass at the back of the border. Gets rangy, so rogue after best show. Colors: white to pink through burgundy, bicolors and rolled petal forms available. Fast from seed, self-sows and the hybrids do not breed true. Full sun, withstands drought and poor soils.

**Verbena hybrida, Garden Verbena:** Well-branched plants to 12 inches high, spread to three-inches. Tiny individual flowers cluster to form flat bloom heads two to three inches across. Hybrids with colors from clear primaries to

muted pastels, everything but orange and yellow. Needs full sun and deep, infrequent watering to bring out best appearance. Prone to mildew with shallow overhead watering.



Tagetes patula, French Marigold

to three feet tall. Fine-textured foliage and 1/4-inch blooms in scarlet, salmon and yellow are set along upright stems. Tough, drought-tolerant answer to vertical color needs after snaps have gone by. Likes full sun and good drainage.

**Salvia coccinea, Scarlet Sage:** Species to 24-inches; hybrids are more compact. Bloom spikes carried above foliage, deep red. Vertical color at a controlled height makes the hybrids useful in formal plantings. Provide full sun, sharp drainage for best performance. Species is native from Florida west to Texas and Mexico.

**Ipomopsis:** Both species, aggregata and rubra, are southern U.S. native plants. Garden form grows L.R.



Cosmos bipinnata

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Plant material must be healthy and pest free on delivery.

Crowns need to be at the soil level on installation. Too low beckons crown rot, too high leaves root tissue exposed. Good air circulation works like a tonic against mildew and rust. Maximize it when possible. Make good culture part of the design process. The wrong plant in the wrong place eats up maintenance time. Choose cultivars for their disease resistance and flower-bearing qualities. **LM**

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## The ups and downs of pH

Check the pH of the soil with every changeout, in more than one place in the root zone for large plantings, especially if some portion of the bed showed poor performance compared to other portions.

Peat moss tends to acidify soils; irrigation water is often alkaline. The amount of lime needed to raise pH a half point (from 6.0 to 6.5) is 1 lb., 6 oz./100 sq. ft. for a sandy soil. The rate is four times that for a clay loam.

Science gets a lot fuzzier for those trying to lower pH. The action of the agricultural sulfur is not as exact as that of dolomitic lime. To bring pH down from 7.5 to 6.5, use 1 lb., 2.5 oz./100 sq. ft. for sandy soils, twice that rate for clay soils. These rates and the results, will be more approximate for alkaline soils than for acid soils. Salt accumulation must also be monitored at changeout time. For arid landscapes, this hazard is ever present. Leaching the bed before changing the planting can help, as can the addition of gypsum with the other amendments.

L.R.



Tagetes hybrids, bicolor Safari Mix.

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