

## Basic Annual care for the landscape

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### Basic landscape care for annual plantings:

Healthy Plants Thrive in Healthy Soil. Better bed preparation reduces maintenance!

1. Plant Fresh
2. Soil
3. Water
4. Fertilization
5. Plant for Success

Soil = Holds water & Nutrients

- Organic matter = Large & small pores
- Better air porosity. More air than water best!
- More granular soils are better

**Soil pH = how tight nutrients hold to soil (pH "Range")**

Less than	6.0	Nutrients leached
Greater than	7.5	Nutrients bound tight

#### You've got a problem...

**Low pH causes:** Small leaves, marginal chlorosis

**High pH causes:** Young leaf chlorosis, stunted plants

- **High pH** tolerant annuals  
'VIMP's = Vinca, Impatiens, Marigold, Pentas
- **"Not Fussies"** = Begonia, Lantana, Zinnia
- **Low pH** loving annuals  
'P's' = Pansy, Petunia, Primula

**Soil E.C. = Salts in the soil**

What can increase soil EC (salts)?

- High EC irrigation water
- De-icing salt run-off
- Excess fertilization

#### You've got a problem...

**Low EC causes:** Small, weak plants

## High EC causes: Marginal necrosis, stunted plants

*Newly planted, "soft" but growing crops more of a problem*

## Soil Structure – Don't Stomp it!

Small beds

- Work from perimeter
- Avoid "knee blight"
- Cultivate as you go

Large beds

- Cultivate center & plant
- Cultivate edge & plant OR Work from one side to the other.

## Water

### ***50% of Landscape water is wasted***

- More plants die due to overwatering than to under watering
- Reduce water as plants fill in
- When leaves touch, they've had enough!

### **Percolation Test Recommended on poorly draining beds**

#### **To check "perc" rate**

1. Dig hole ~6" in diameter ~5" deep
2. Fill with water, let drain
3. Refill with water and measure drop in water depth every 30-60 minutes
4. Calculate perc as 'inches/hour'
5. 3" per hour good

Less than 1" per hour = Aquascaping!

## Fertilization

How much N-P-K?

- N (nitrogen) ☑ 'Gas' to grow
- P (phosphorus) ☑ Stem stretch, roots(?), flowers(?)
- K (potassium) ☑ Tone, 'hardness'

Granular application of slow release (12-12-12)

- Need water to activate
- Liquid application of 20-20-20
- Releases faster with heat

# Planting

## Bed & pot moisture should be similar

☆ **Ideal: Bed moisture = Pot moisture**

**“Floaters” happen when Pot is dry & Bed is wet** (Watering-in cause’s pots to “float” to surface)

- ✓ Plant floats up above soil surface, too high
- ✓ Plant wicks and dries out

**“Sinkers” happen when Pot is wet & Bed is dry** (Watering-in cause’s pot to “sinks”)

- ✓ Root rot when plant is below soil line.

Greenhouse Spoil versus Landscape (Field) soil

Potting Soil	Field soil
Organic	Mineral
Maximum porosity	Compacted
Nutrient balanced	Nutrient imbalance
pH balanced	pH extremes
High Cation Exchange Capacity (CEC) *	Low Cation Exchange Capacity
Designed to dry out	Holds water

\*CEC = capacity of a soil to hold exchangeable cations. CEC is an inherent soil characteristic and is difficult to alter significantly. It influences the soil's ability to hold onto essential nutrients and provides a buffer against soil acidification.

## Planting Depth Matters with annuals.

- Treat it like you would a tree or shrub.
- Crown of the plant at soil level!

