

Spring Gardening Basics

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Saturday, April 12, 2025

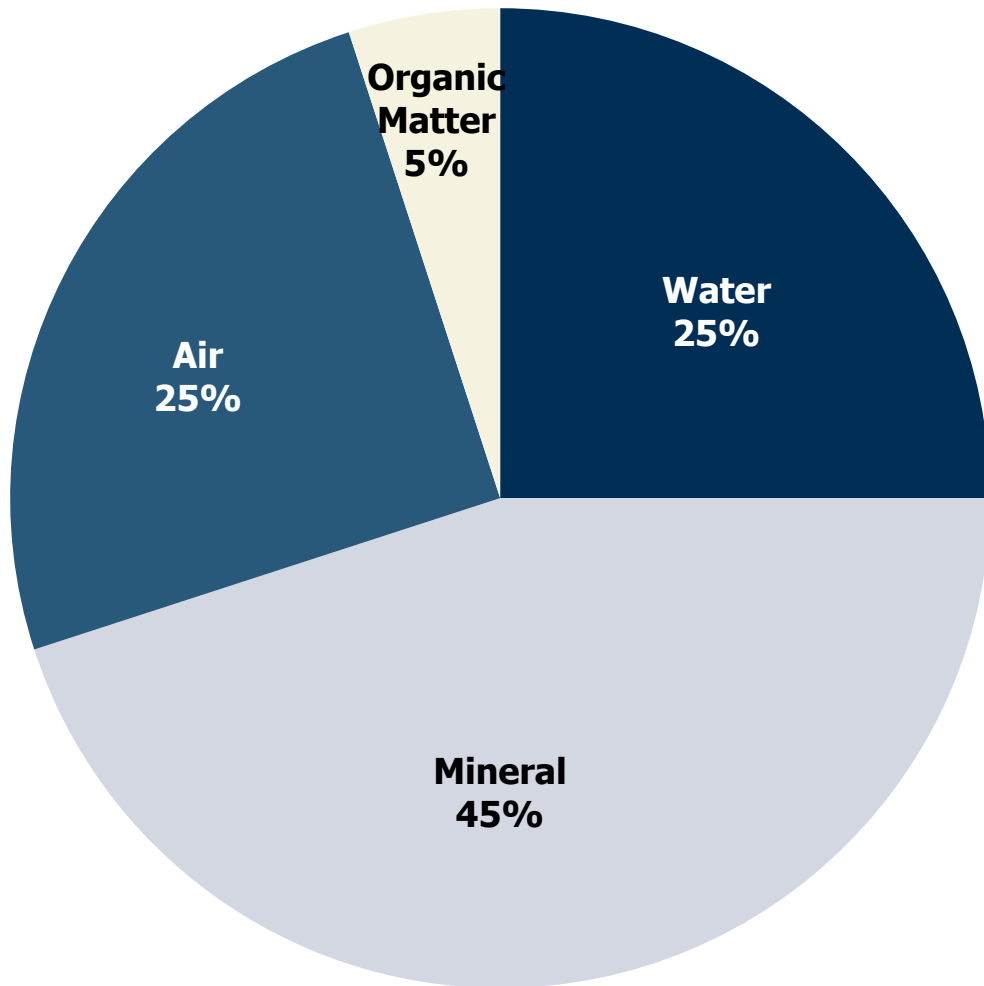


WORKSHOP SUMMARY

- Gardening basics
 - *Soil*
 - *Mulch / amendments / compost*
 - *Fertilizers*
 - *Plant selection*
 - *Planting tips*
- Garden management
 - *Tools*
 - *Weed control*
 - *Irrigation*
 - *Pest control*
 - *Disease / deficiency control*
 - *Resources*



HEALTHY SOIL COMPOSITION



25% Water - H₂O

All life needs an adequate amount



25% Oxygen - Air

Prevents soil compactions



5% Organic Matter - Compost

Breakdown of decaying plant material, manure, bacteria and living microorganism

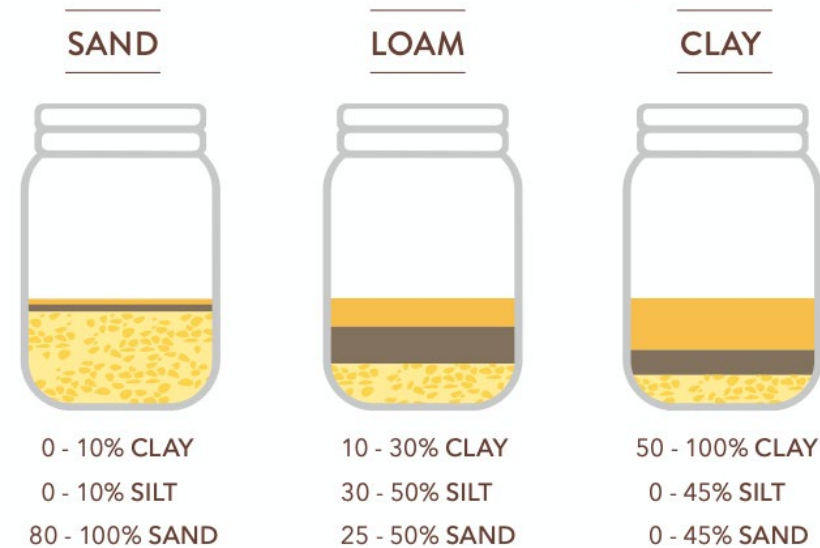


45% Mineral - Native Soil

Loam, Sand, Silt, Clay

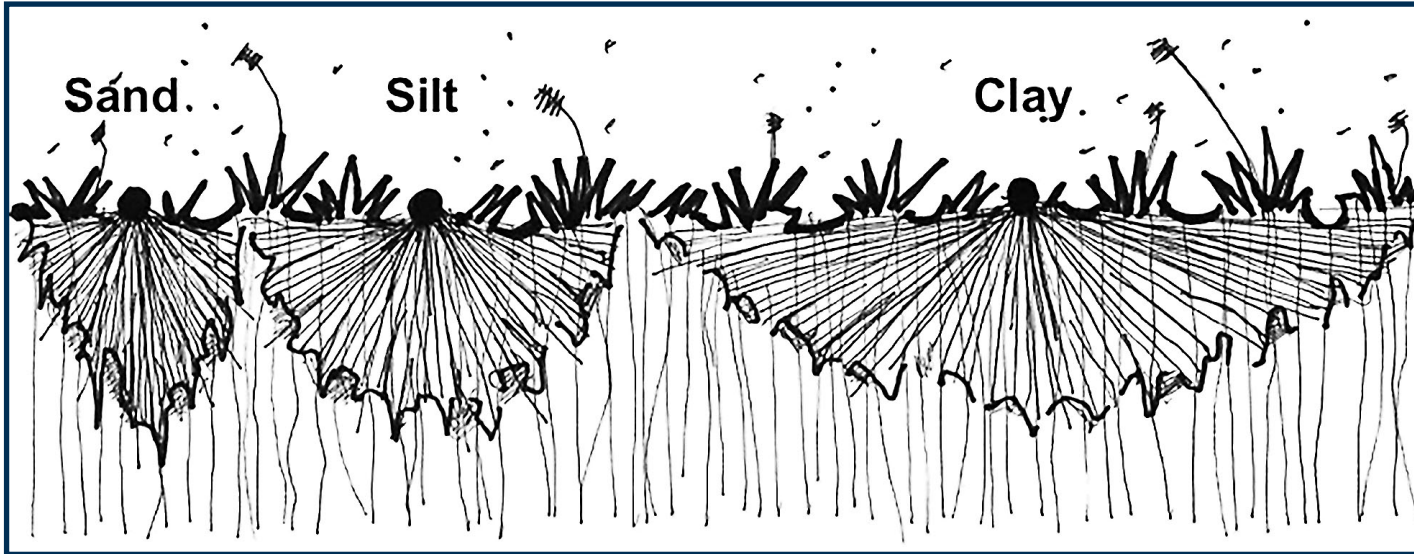
SOIL TYPE: TESTING

1. Fill clear jar halfway with soil samples
2. Fill jar with water leaving 1 inch of air
3. Attach lid, shake jar vigorously
4. Wait up to 24 hours for soil to settle



See page 29 of SoCal Yard Transformation Book for more testing options

SOIL: EFFECTS OF IRRIGATION



| Soil Type | Rates of Infiltration | Spacing of Irrigation | Frequency Cycle | Duration of Irrigation |
|-----------|-----------------------|-----------------------|-----------------|------------------------|
| Sand | Deep / Direct | Closer | Less | More |
| Silt | | | | |
| Clay | Shallow / Spread | Distant | More | Less |

SOIL: WHAT KIND TO USE?



For Potting Containers

Potting mix

For California Native Plant
Landscapes

Only native soil

For Edible Plants in
Planter Box or In-Ground

Organic compost
amended soil

SOIL PROBLEM CONDITIONS



Soil compaction



Over watering

| Soil | Conditions | Problem | Solution |
|-----------------|---------------------------------------|-----------------------|--|
| Soil compaction | Lacking 25% air, lacking 25% water | Impermeable for roots | Aerate soil add organic compost up to six to eight inches |
| Over watering | Exceeding 25%, water lacking, 25% air | Anaerobic conditions | Cut back on watering 80% plants die from overwatering |

MULCH / COMPOST / AMENDMENTS

| | Mulch | Amendments | Compost |
|-----------------------|-------|------------|---------|
| Dry Organic Matter | * | * | * |
| Manure | | * | * |
| Coffee Grounds | | * | * |
| Compost Tea | | * | * |
| Peat Moss | | * | * |
| Worm Castings | | * | * |
| Microbial Amendments | | * | * |
| Gypsum | | * | |
| Bone Meal /Fertilizer | | * | |
| Perlite / Vermiculite | | * | |
| Food Scraps | | | * |
| Green Organic Matter | | | * |

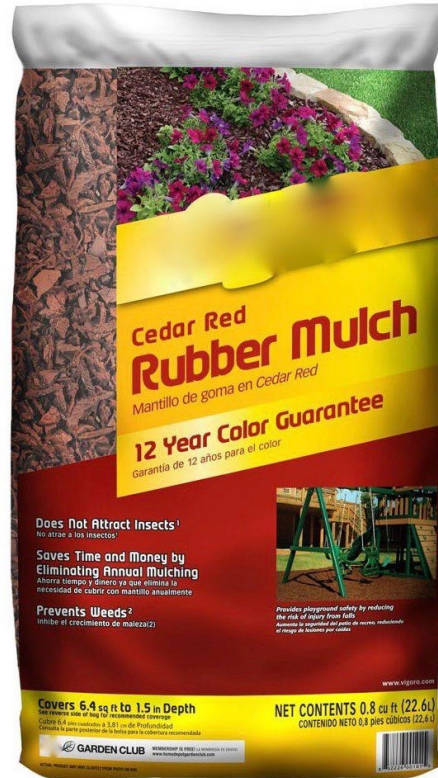


Organic



Amendments

MULCH TIPS & WARNINGS



Keep contaminated mulch or manure out of your garden

FERTILIZER

- Inorganic Fertilizer
- Liquid or granule fertilizer
- Made from minerals and rock
 - *Do not apply over plants, on stem or trunk*
 - *Fertilizer can burn plants*
 - *Apply as indicated*

Nutrients

| NITROGEN (N) | PHOSPHORUS (P) | POTASSIUM (K) |
|------------------------------|-------------------------------------|--|
| Leaf Growth Color Pigment | Root Development Flowers / Fruit | Overall Plant Recovery & Support |

FERTILIZER

- Organic
- Compost: Decomposed plant matter and animal waste
 - *Best - Nonmeat fertilizer*
 - *Does not burn plant*
 - *Can add anytime of year*
 - *Can add as often as needed*
- Manure: Nonmeat eating animal waste
 - *Excellent nitrogen source*
 - *Best when solarized*
- Bone meal: Ground animal bones
 - *Slow release*
 - *Phosphorus and calcium*



PLANT BUYING TIPS

- Environmental needs
 - *Can you accommodate plant's needs?*
 - *Lighting*
 - *USDA Zone*
 - *Watering needs*
 - *Maturity space needs*
- Functional needs
 - *What purpose will the plant serve?*
- Maintenance needs
 - *Can you keep up with the mature plant?*
- Small size plant
 - *Avoid root-bound plants*
- Vigor
 - *Healthy Plant*



PLANTING TIPS

- Plants must be moist when ready to plant
 - *Water thoroughly, to avoid dry pockets*
- The Planting Hole
 - *Dig soil out of the planting hole, up to 1.5 - 2x the pot diameter*
 - *Fill with water and permit water to absorb to existing soil*
- Plant on a cool day or late in the day
 - *Reduce heat stress of plant*
 - *Never plant on HOT days*



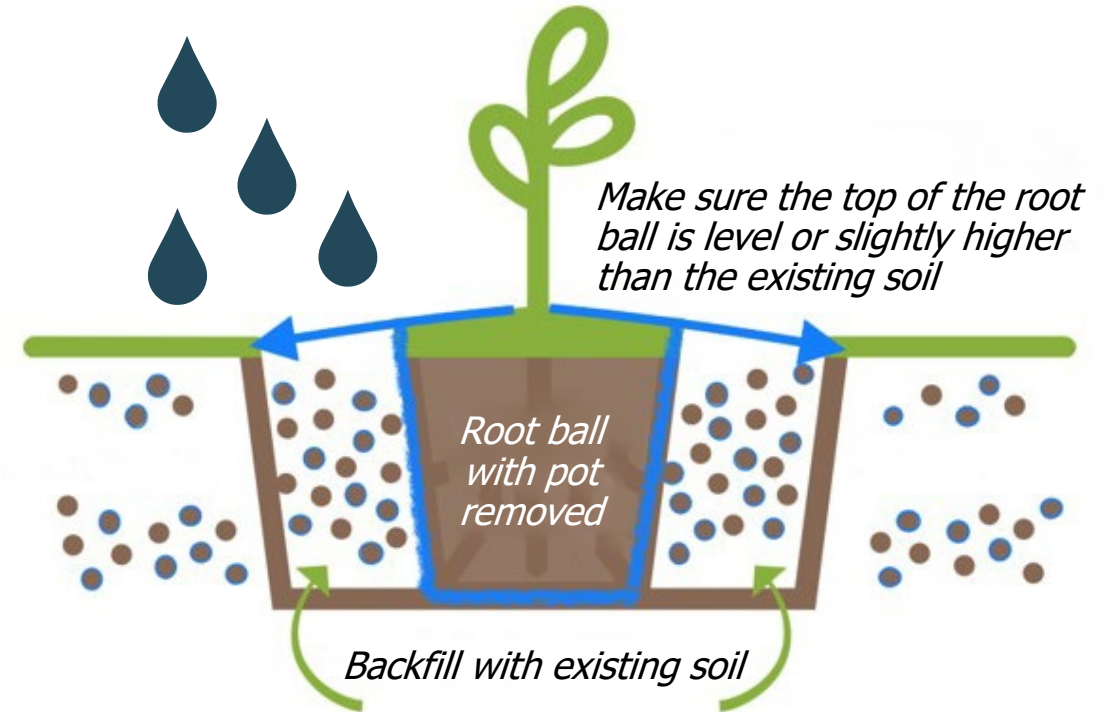
www.DigAlert.org

*Utility Conflicts with
Overhead &
Underground Lines*

100% Free Service

PLANTING TIPS

- No air pockets
 - *Backfill with existing soil only*
 - *Tamper soil to eliminate air pockets*
- Compost, mulch, fertilizer, and water
 - *Can add compost over plant soil*
 - *Add mulch up to 3 inches, do not touch plant*
 - *Do NOT add fertilizer*
 - *Water the soil around the plant*



GARDEN MANAGEMENT: TOOLS

- Maintain the tools
 - *Keep the tools clean*
 - *Keep the tools sharp*
 - *Discard or repair broken tools*
- Sanitize garden cutting tools
 - *Isopropyl Rubbing Alcohol 50 - 70%*
- Always use the correct tool
 - *Do not compromise safety for convenience*



GARDEN MANAGEMENT: GARDEN TASKS

- Inspect the garden
 - *Trim, prune or remove plants that are:*
 - *Dead*
 - *Damaged*
 - *Diseased*
- Divide overcrowded/overgrown plants
 - *Moisten soil on plant*
 - *Use sharp garden tools*
 - *Split and divide plant*
 - *Relocate split or divided plants*



GARDEN MANAGEMENT: WEED CONTROL

- Weed management
- Prevent, control, and eradicate
 - *Tools:*
 - *Weed wacker*
 - *Hula hoe*
 - *Hand pulling tools*
 - *Sod cutter*
 - *Solarize weeds/soil with plastic during hot weather*
 - *Cardboard to suppress weed growth*
 - *Chemical herbicide*
 - *Pre-emergent herbicide*

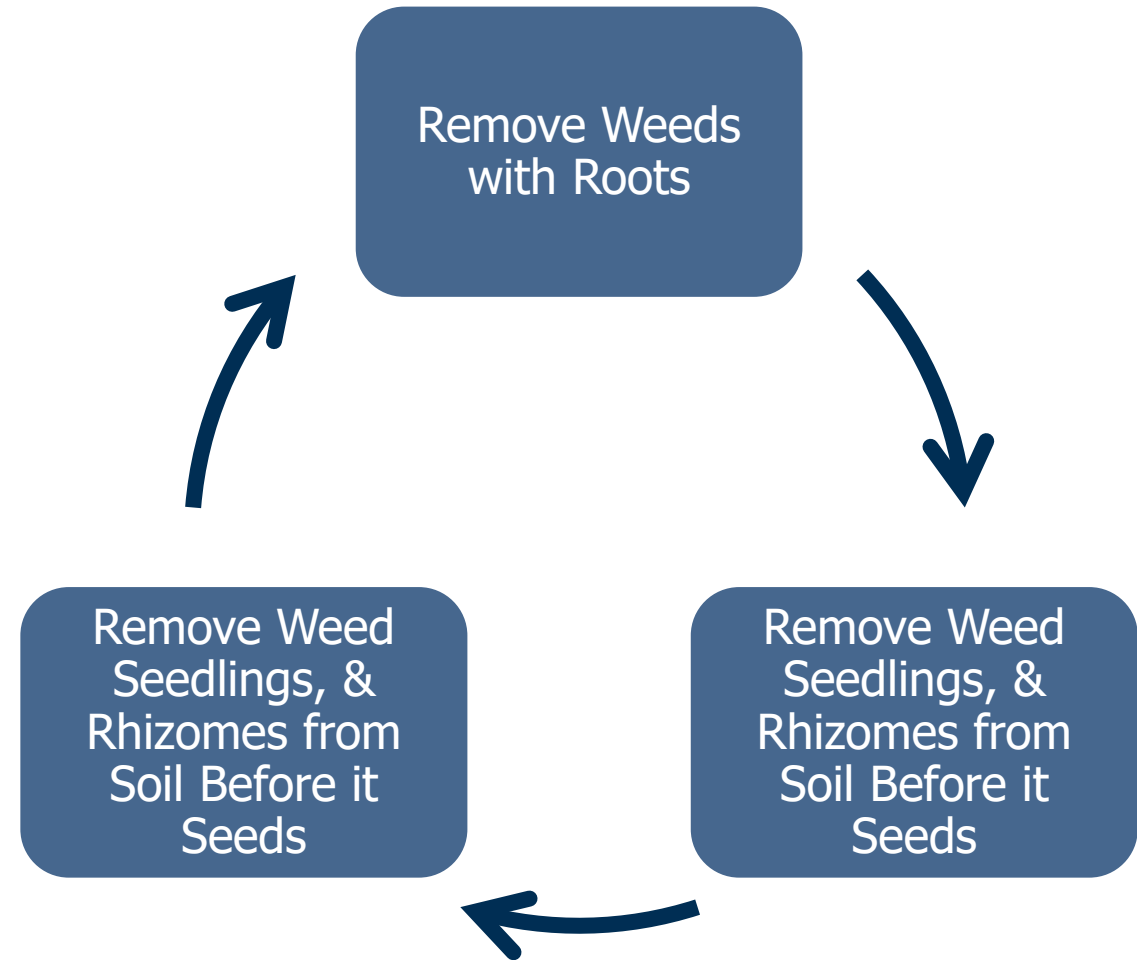
Vinegar Weed Recipe: 1-gallon distilled vinegar +1 cup salt + 2 tbsp dish soap



Do not put weeds in the compost pile

GARDEN MANAGEMENT: WEED CONTROL

- DO NOT USE
 - *Weed cloth or weed barrier*
 - *They do not block noxious weeds*
 - *The heat destroys the healthy microorganism in the soil*
- Slopes can collapse or erode under the weed cloth or weed barrier



GARDEN MANAGEMENT: IRRIGATION

- Drip irrigation is best
 - *Hydrozone Irrigation*
 - *Use a Weather Based Irrigation Controller*



*See SoCal Yard
Transformation Book
Pages 82-84*



GARDEN MANAGEMENT: IRRIGATION

- East Valley Water District outdoor residential watering guidelines



Water between
6:00 p.m. and 6:00 a.m.



No irrigation two days after
measurable rainfall

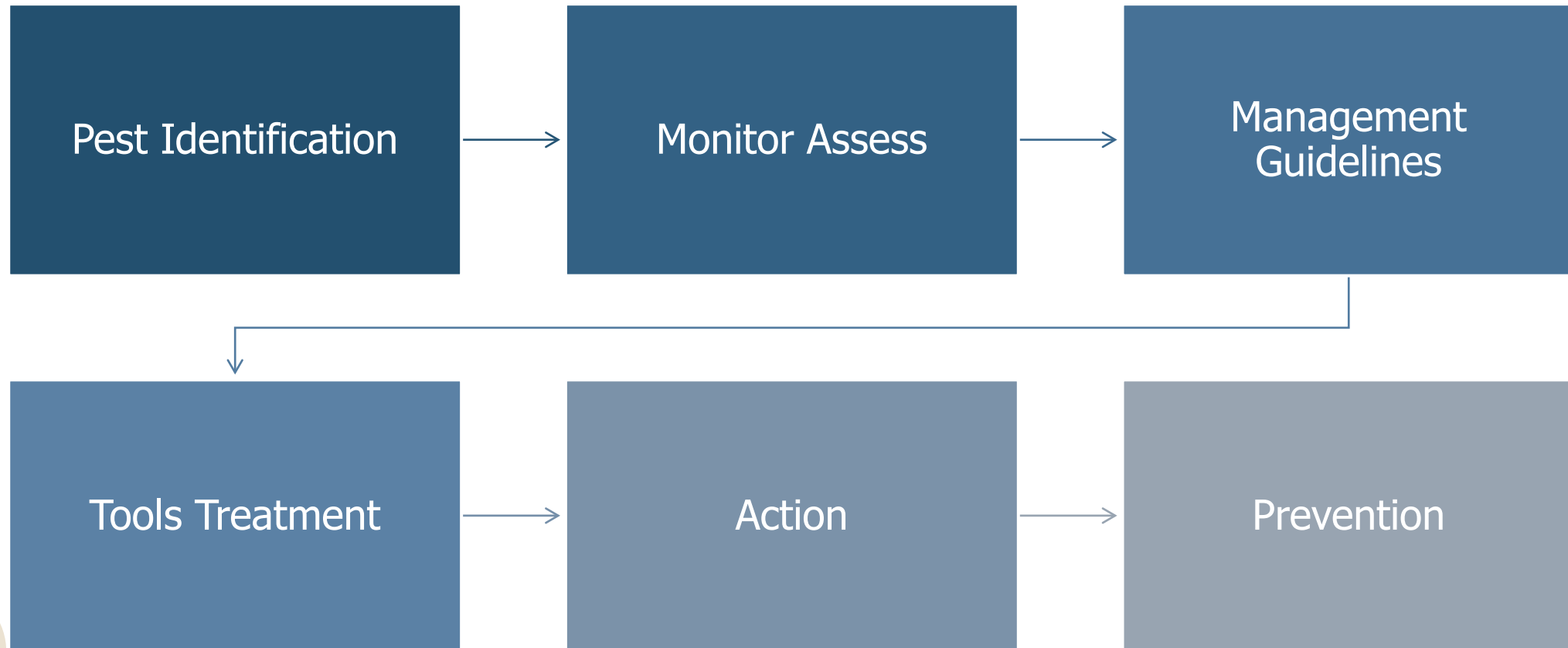


Water in three cycles of 3-5
minutes, one hour between
each cycle



Irrigation Troubleshooting
See So Cal Yard Transformation Book
Pages 100 - 104

GARDEN MANAGEMENT: PEST CONTROL



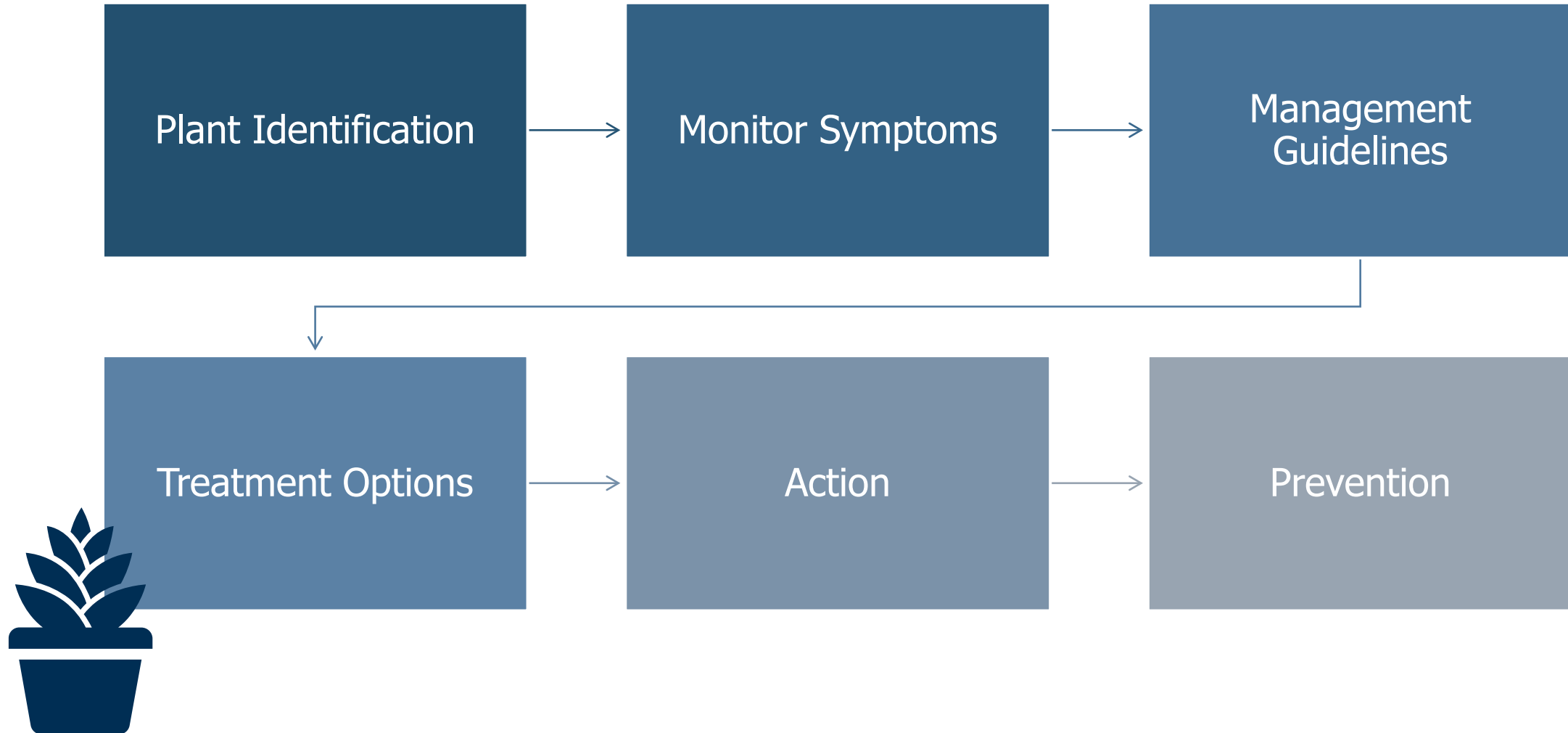
GARDEN MANAGEMENT: PEST CONTROL



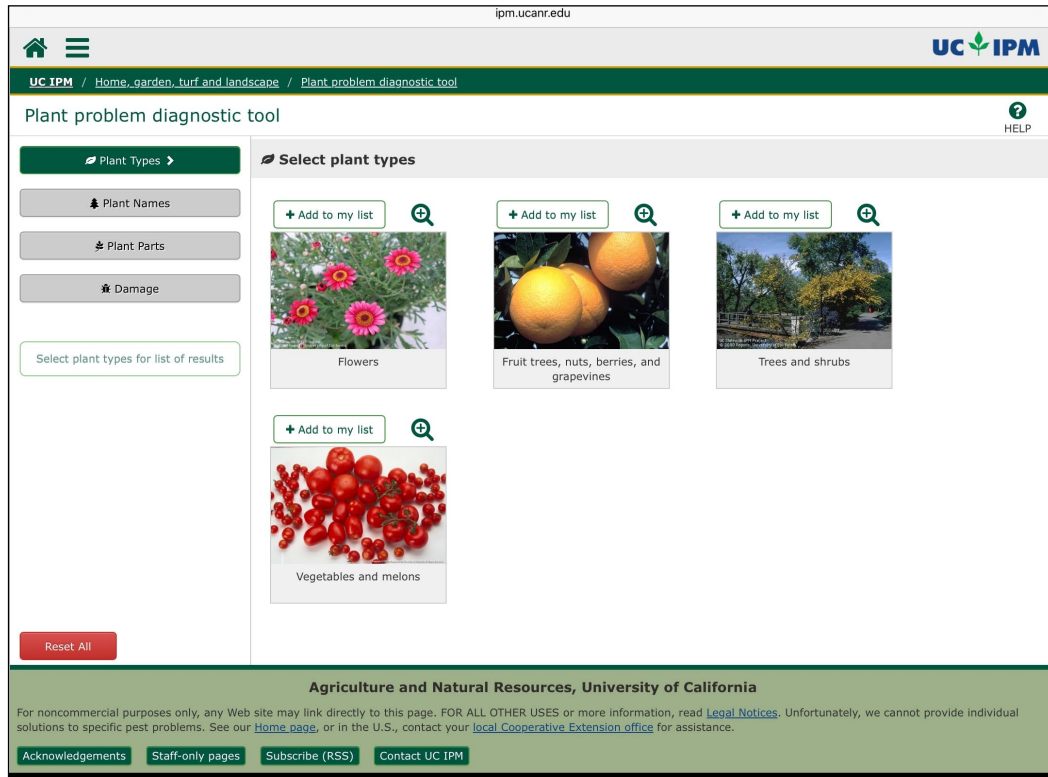
Animal burrow



GARDEN MANAGEMENT: DISEASE / DEFICIENCY CONTROL



GARDEN MANAGEMENT: DISEASE / DEFICIENCY CONTROL



RESOURCE BOOK

- Available online
 - *English edition*
 - *Spanish edition*



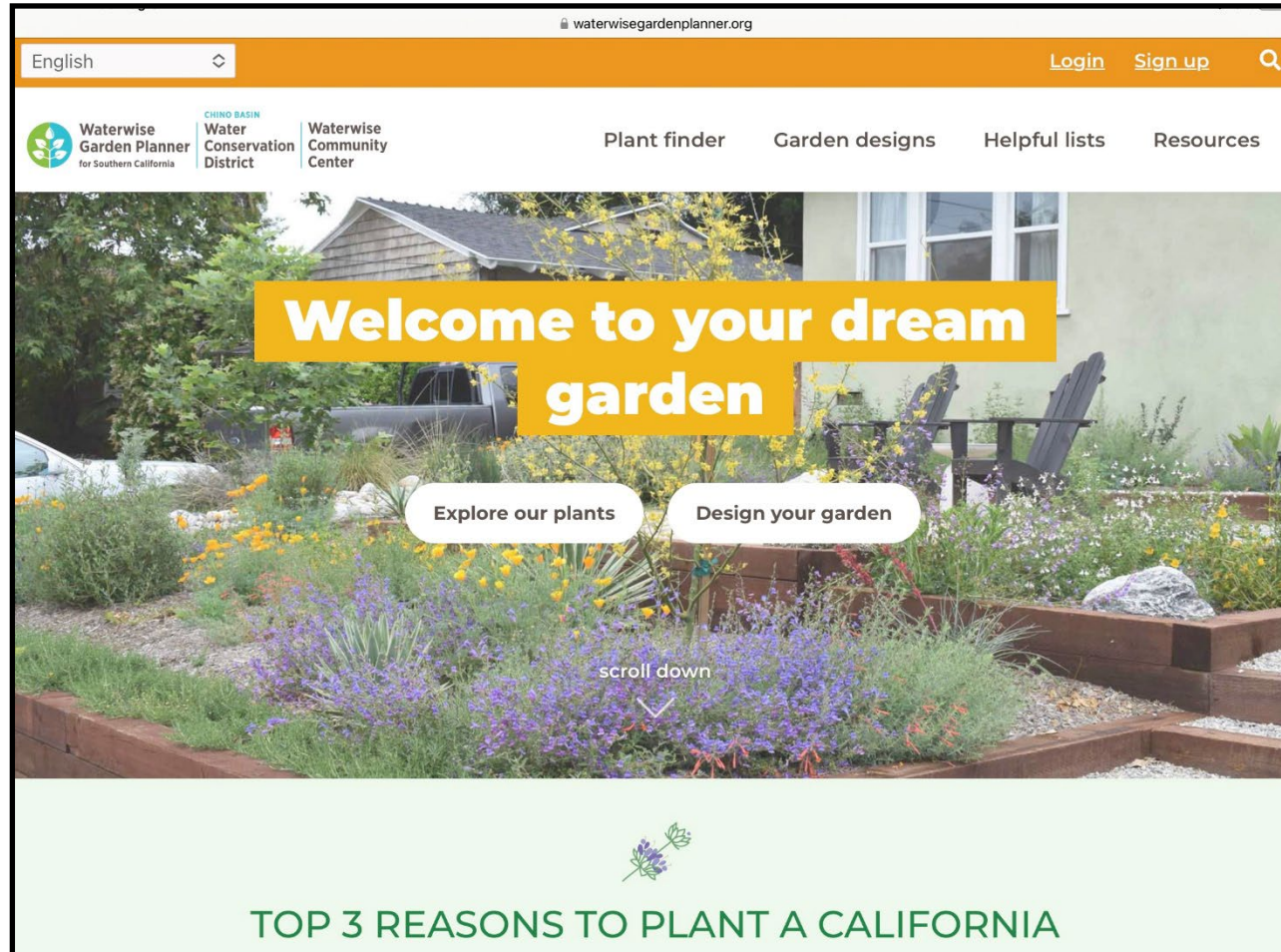
RESOURCE WEBSITE



www.ipm.ucanr.edu

- Identify and Manage
 - Pest and diseases
- Spanish publications available

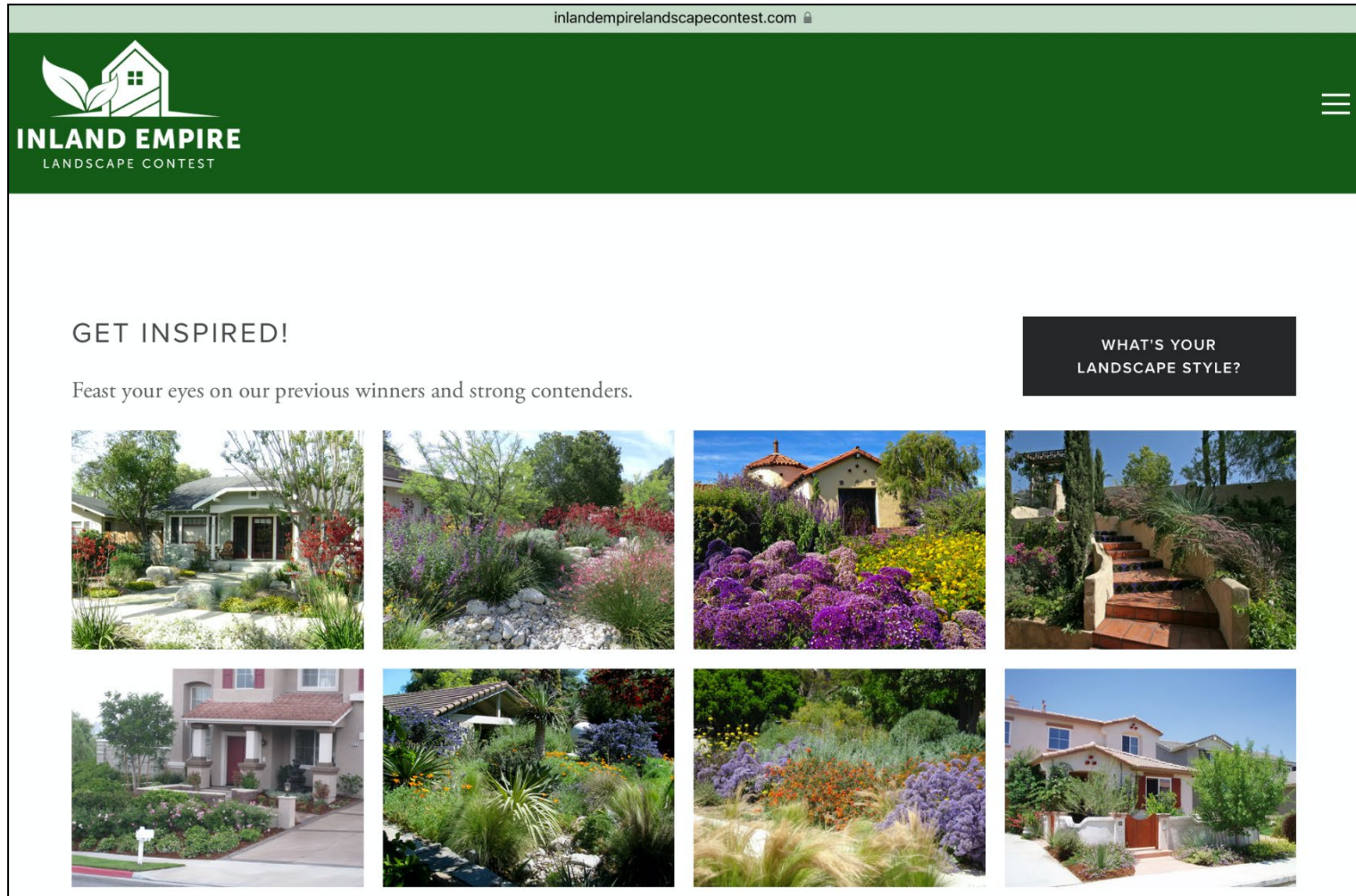
RESOURCE WEBSITE



www.waterwisegardenplanner.org

- Plant Finder
 - *Search criteria for Inland Empire climates*

INSPIRATION



InlandEmpireLandscapeContest.com

THANK YOU FOR JOINING US

