MAXIMIZING THE SUCCESS OF YOUR HOME GARDENS

by using

TRIED AND TRUE, SCIENCE-BASED GARDENING TECHNIQUES
How can you maximize your success in your gardening efforts?

Observe, Inquire & Discover
1. PLANT SELECTION
2. PLANTING TECHNIQUES
3. POST-PLANTING TECHNIQUES
1. PLANT SELECTION

- Right plant right place
- Where are you learning about and buying your plants?
- What type of plants are you using?
- What size of plants are you using?
Select plants based upon your garden site:

- Local micro-climate
- Orientation
- Aspect
- Prevailing winds
- Shading elements
- Soil type(s)
USDA PLANT HARDINESS MAP

Interactive map at http://planthardiness.ars.usda.gov/PHZMWeb/
Select based on your garden’s purpose:
Where are you learning about plants?

- Online information
  - .edu
  - Yavapai County Native Plants
  - mswn.com
  - Highcountrygardens.com

- Local Plant retail stores

- Master Gardener help desks
Specialize in water efficient plants
Note: Cold hardiness is limiting factor
HIGH COUNTRY GARDENS

Specialize in hardy perennials and low water use plants. Founded by David Salman, a Horticulturist.

Hesperaloe parviflora Straight Up Red PPAF | Straight Up Red Texas Yucca

Straight Up Red Texas Yucca PPAF is an everblooming yucca that produces a summer-long display of red-pink flowers held on strongly upright growing flower spikes. 2017 Plant of The Year.

Zones 5 - 9

Advantages
- Easy to Grow
- Extended Bloom Time (more than 4 weeks)
- Good for Containers
- Good for Cut Flowers
- Good Rockgarden or alpine plant
- Attract Butterflies
- Attract Hummingbirds
- Rabbit Resistant
- Native / Evergreen
- Low Maintenance

Click an image to see it above:
Where do you purchase your plants?

- On-line
- Big Box Stores
- Local Nurseries
- Specialty Nurseries
What type of plants:
- Non-native
- Native & Naturalizing
- Annuals
- Perennials
Native plants:

- Are adapted to our local climate
- Are adapted to our native soil
- Support biological diversity and provide habitat
- Are low maintenance
- Are beautiful
Adapted to our local climate:
PRESCOTT CLIMATE DATA
Adapted to our native soils

- Require no amendments to correct for the alkalinity of our soils
- Require no fertilizers
## Nutrient Availability Chart

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### Optimum pH Zone for Soil

<table>
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<th>Acidic</th>
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<th>Basic</th>
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**Key:**
- **NA** = Not Available
- **SA** = Slightly Available
- **MA** = Moderately Available
- **HA** = Highly Available
…maximum phosphorus availability occurs between soil pH 6.0 to 7.0. In Yavapai County our soils tend to be alkaline and have a pH of 7.0 to 7.8 and greater. Soils with a pH of 7.5 and higher typically have a high calcium concentration that binds phosphorus as calcium-phosphate creating an insoluble compound that is not available to plants (this process is called P fixation).
Native plants have symbiotic relationships with microbes (mycorrhizal fungi & bacteria) that allow them to acquire needed nutrients & phosphorous from the soil *without* using fertilizers or amendments...
Size of Plant:

- From seed
- 6 Pack
- 4” pot
- 1 gallon pot
- 5 gallon pot
- 15 gallon pot
QUESTIONS?

RELATED TO PLANT SELECTION CONCEPTS
2. PLANTING TECHNIQUES:

- When to plant
- Use U of A Planting Guidelines
- Hydration techniques
Best Season to Plant?

- **Spring**
  - Plant availability high. Soil just beginning to warm. Little time for root systems to develop to support the surge of leaf growth and flowering. Weather variable with danger of frost.

- **Summer**
  - Plant availability high. Temperatures hot! Plants require energy to develop both their root systems and growing leaves, flowers and/or fruiting. Need frequent watering. Plant conifers late summer.

- **Fall**
  - Plant roots grow when the soil temperature is 40+. During the late fall, the root systems of the fall-planted plants & deciduous trees develop and become better established. When spring arrives, the root system can support the surge of spring growth.

- **Winter**
  - Late winter is a good time to plant bare root plants, such as roses & fruit trees. Hydrate the roots well before planting and trim off any dead or damaged roots.
Handle the plant by the root ball, not by the trunk or stem!
Hydration:

- Fill hole with water & let drain completely before planting.
- Saturate root ball prior to planting. Submerge pot in Container until no bubbles emerge. Let drain.
Maximize contact area between soil of plant and native soil:

- Walls of planting hole should be rough and slightly slanting outward
- Gently loosen root ball before planting and cut any circling roots
When Planting:

- Backfill
  - Amend to improve drainage, water holding capacity or organic content, <25%
  - Do not pre-wet backfill before planting
- Avoid planting too deep
- Compact soil around plant gently
Water deeply right after planting

- Use hose or bucket
- Add water gradually
- Helps settle soil
  - Add more soil as needed
- Removes air pockets
QUESTIONS?

RELATED TO PLANTING TECHNIQUES
3. POST PLANTING TECHNIQUES

- Watering
- Drip irrigation
- Mulch around plants
- Create pathways and use them
WATERING / IRRIGATION
MULCH
PATHWAYS
1. PLANT SELECTION
2. PLANTING TECHNIQUES
3. POST-PLANTING TECHNIQUES
For more information about our programs, visit our website at extension.arizona.edu/yavapai

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