Annuals and Perennials

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Annuals and Perennials

* Herbaceous annuals
  summer and winter
* Herbaceous perennials
  bulbs, grasses, flowering herbaceous plants
* Roses
Annuals

- Complete life cycle in one growing season
- Spring and fall annuals, AZ different than other climates
- Provide instant color, long season of bloom
- Labor intensive bed preparation
- Some have high maintenance requirements
Annuals

Cool-weather plants (winter annuals)
Planted Sept. – Nov. at low elevations
Planted in spring at higher elevations
Bloom fall through spring

Heat-tolerant plants (summer annuals)
Planted after last spring frost
Bloom through summer and fall
Winter annuals

- lobelia
- alyssum
- pansy
- petunia
- snapdragon
- geraniums
- dusty miller
- blue salvia
- dianthus
- stock
### Summer annuals

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<thead>
<tr>
<th>blue salvia</th>
<th>golden fleece</th>
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<tr>
<td>cosmos</td>
<td>vinca</td>
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<td>lisianthus</td>
<td>salvia</td>
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<td>nierembergia</td>
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<td>portulaca</td>
<td>gazania</td>
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Transition plants

poppy
ranunculus
chrysanthemum
marigold
kale
gerbera
Successful soil preparation for annuals:

Select good location

desired light levels

free of debris, weeds

loose, fertile, well-drained soil

Work soil only if not too wet or too dry.
Successful soil preparation for annuals:

Organic amendments improve water-holding capacity, drainage, aeration.

Compost, manure, peat moss, leaf mulch (2-3 ″, worked in top 10-12″ of soil)

Apply 1-2 months before planting.

Careful with “raw” organic materials!
Successful soil preparation for annuals:

3. Fertilizers

Add N and S shortly before planting

1-2 lb of ammonium phosphate
(16-20-0)

3-5 lb of sulfur

per 100 square feet.

Incorporate 6-8 inches deep.
Perennials

• Last several years depending on species
• Provide seasonal color
• May die back during their off season (winter or summer)
• Require maintenance
• Many perennials are used as annuals
Perennials

When planting perennials consider:
- Light requirement
- Good soil drainage
- Time of bloom
- Plant height
- Flower color
- Foliage color and persistence
Maintenance of perennials

- Cutting back
- Staking
- Deadheading
- Mulching
- Fertilizing
- Dividing after several years
Bulbs
Publication: Bulbs for Southern Arizona
Bulbs

Rhizome

Tuber

Bulb

Fleshy bases of leaves

Stem

Adventitious roots

Taproot
Iris rhizome  Modified stem

Potato tuber  Modified stem

Dahlia, (Ranunculus, Anemone) tubers  Modified root
- Onion bulb: Fleshy leaves
- Tulip bulb: Foliage leaves, Flower bud, Scale leaves, Fleshy, food-storage leaves, Daughter bulb (developed from an axillary bud), Stem, Roots
- Gladiolus corm: Dry leaf bases, Daughter corm, Cormel, Mother corm (from previous year), Contractile root
- Modified stems
Gladiola bulbs – ¾” – 2” diameter
Requirements for bulbs

- Full sun for winter
- Well-drained soil
- High organic matter
- No competition from trees or grass
- Plant when temperatures below 80 °F
- Plant at proper depth (2-3x of bulb diameter)
- Water thoroughly after planting
Requirements for bulbs

♠ Apply mulch
♠ Water regularly once leaves appear
♠ Fertilize with low N, high P bulb fertilizer
♠ Tulip and hyacinth bulbs require chilling, store in refrigerator for 3-6 weeks
♠ Allow foliage to dry before removing or digging bulbs
♠ Divide when crowded (3-5 years)
Bulbs for forcing

Indoor forcing from November to April

Recommended bulbs:
Tulip, paperwhite narcissus, hyacinth, daffodils, crocus, muscari

Discard forced bulbs once they bloomed.
Forcing bulbs

Use only large, firm bulbs.
Fill container half full of potting soil.
Arrange upright on surface (3-5 tulips, narcissus per pot).
Cover with potting soil so bulb tip just shows.
Store 12-15 weeks at 40-45 F, water in storage.
When shoots are 1-2” tall bring into cool, semi-dark room, transfer 4 days later to bright, 65-70 F.

Hyacinths in water

Paper white narcissus or daffodils in pebbles
Common questions about bulbs

Bulbs are rotting
Don’t bloom
Blooms are hidden in foliage or are distorted
Don’t come up next year
Ornamental grasses

- Year-round interest
- Low maintenance