Successful Summer Vegetable Gardening

How to grow THE BEST EVER
Spring 2021

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What are we going to talk about?

- Where to put your garden?
- In what?
- Fencing
- Vegetables in your flowers?
- Soil Preparation
- How to grow
- Growing Seasons

- Tomato Basics
- Fertilizers
- Pests
- Diseases
- Watching your garden grow
Where?

- Choose a convenient spot.
- Near water.
- Full sunlight-6 hrs.
- Can be fenced or caged
- Avoid windy area.

(good luck!)
Where-IN WHAT?
Fencing

**Rabbits** - three foot tall chicken wire fence with 1-inch hexagonal mesh buried a few inches

**Deer** - 6 to 8 feet tall fence, mesh or electric could be considered, many designs

**Raccoon** - combination of rabbit and deer fence

**Squirrels** – completely covered cages

**Javelina** – sturdy wire field fence buried 6”
Vegetables in your flower garden?
Soil Preparation

Container or Raised Bed Gardens

• 50/50 mix of compost or bagged planter mix with native soil.
• Mix thoroughly.
• Irrigate to settle.
• Allow to dry.
• Rake.
### Arizona Soil Map

**WHERE** | **SOIL TYPE**
--- | ---
PRESCOTT | SANDY
PV/CV | CLAY
SEDONA | SANDY/CLAY
Soil Amendments

Sandy Soils

Goal: increase water/nutrient holding

- All composted (organic) bulk materials
  - Sphagnum peat
  - Composted manure, hay, wood chips
- Peat Moss
- Vermiculite
Soil Amendments

Clay Soils

**GOAL:** increase porosity, improve aeration, drainage

- Composted straw, wood chips
- Composted manure
- Sphagnum peat moss
- Perlite
- Sand (very large grain)

*Careful!*
WHAT TO GROW?

Prescott Area Vegetable Planting Times

- **Warm** weather: after mid-May
  - Soil temperature greater than 70F

- **Cool** weather: spring, fall
  - Soil temperature between 50-60F
HOW TO GROW IT

COOL SEASON

Spring and Fall

Roots

• Radish, turnip

• Direct seed

Greens

• Kale, lettuce, mustard, spinach

• Direct seed
HOW TO GROW IT

WARM SEASON

Summer

• **Big 4**: Eggplant, chili peppers, tomatoes, sweet peppers (bells)

• Plants
Cucurbits

- Summer squash, winter squash, cucumbers, watermelon, pumpkin
- Plants or direct seed when soil temp 70F
TOMATOES
THE BASICS

Determinate tomatoes
• Bush type
• Produces main crop then production tapers off
• Earlier production (than indeterminate)

Indeterminate tomatoes
• Vine type
• Produces over long growing period, until frost
Heirloom Tomatoes
• Open Pollinated, OP, (natural)
• Little disease resistance
• Mostly vine type
• Can save seeds

Hybrid Tomatoes
• Controlled pollination to preserve certain traits
• Both bush and vine types
• Resistant to many diseases
• Cannot save seeds
Let's talk about fertilizers.

N-P-K is percentage by weight.
Nitrogen (N) **healthy foliage**.

Phosphorus (P) **strong roots**, make seeds, fruit and flowers, stores energy for photosynthesis, fights disease.

Potassium (K) **hearty growth**, strong stems, helps protect from cold and drought, strengthens root system.

**Organic and Inorganic (manufactured) fertilizers are labeled the same: NPK**
Organic Fertilizers

Derived from animal or vegetable matter
All are slow release

• Blood Meal – (12-0-0 NPK)
• Alfalfa Pellets- (3-2-2 NPK) easy to use
• Composted Manures-Horse (.7-.3-.6)
• Seaweed-liquid, multiple nutrients
Inorganic Fertilizers

**Mined or man-made**
- Timed-release products (osmocote, etc.)
- Urea (46-0-0)
- Triple Super Phosphate (0-45-0)
- Others…
# Tending Your Garden

## PESTS

<table>
<thead>
<tr>
<th>Pest</th>
<th>Non Chemical</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aphid</td>
<td>Soap spray (2)</td>
<td>carbaryl (1)</td>
</tr>
<tr>
<td>Thrips</td>
<td>Soap spray, Neem oil</td>
<td>pyrethrums</td>
</tr>
<tr>
<td>Spider Mites</td>
<td>Soap spray</td>
<td>malathion</td>
</tr>
<tr>
<td>Squash Bugs</td>
<td>HD soap spray (3) Hand pick</td>
<td>None effective</td>
</tr>
<tr>
<td>Blister Beetle</td>
<td>HD soap spray</td>
<td>carbaryl (1)</td>
</tr>
</tbody>
</table>

1. Carbaryl active ingredient in Sevin (Ortho)
2. Soap spray: one tsp dish detergent to 1 pint water
3. HD Soap spray: 4 tsp dish detergent to 1 pint water
<table>
<thead>
<tr>
<th>Disease</th>
<th>Characteristics</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powdery Mildew</td>
<td>White/grey fungus on leaves; stresses plant, inhibits photosynthesis.</td>
<td>Spray with any fungicide (1)</td>
</tr>
<tr>
<td>Curly top virus</td>
<td>Spread by beet leaf hopper. Affects tomatoes, beets, cucumber, others. Puckered leaves, browning, kills plant.</td>
<td>Remove infected plants</td>
</tr>
<tr>
<td>Fusarium Wilt (tomatoes)</td>
<td>Soil borne fungi. Symptoms similar to Curly leaf virus.</td>
<td>Remove infected plants</td>
</tr>
</tbody>
</table>

(1) MG Fungicide: 1 tbs baking soda, 1 tbs soap, 1 gal water; do not store
Watching Your Garden Grow

- **Mulching** dramatically reduces water needs
- Water lightly... “1 inch rule”
- Fertilize when crops start
  - Except tomatoes
- Be ever vigilant for bugs
Take Away

• Vegetable Gardens need lots of sunlight.

• Mulching can conserve water.

• Fertilizers can be organic or inorganic.

• “Cool” and “Warm” Season crops have different planting times.

• Many garden pests can be controlled with soap spray.
COMMENTS

AND

QUESTIONS
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