CITRUS CARE FOR THE LOW DESERT RESIDENTIAL LANDSCAPE
Disclaimer

This is by no means a complete “How to” grow citrus in the Coachella Valley lecture. I took 120 hours of college-level citrus course work at Cal Poly Pomona. There is no way that I can condense 120 hours into 90 minutes, but I can cover the highlights!

More extensive general citrus growing knowledge can be obtained by going to our website (cvwd.org) and accessing our supplemental information from our previous 2018/2020 presentation:

Click: Conservation -> Seminars, Workshops & Classes -> Residential -> Past Workshop Materials -> Scroll down to: “Caring for Citrus” (supplemental handouts)
CITRUS CARE FOR THE LOW DESERT RESIDENTIAL LANDSCAPE

1. Chose/Pick out the right tree.
2. Plant in the right place.
3. Plant correctly
4. Minimize pruning
5. Protect the trunk.
6. Fertilize and Irrigate properly
7. Protect from pests and frost
Check Your County Crop Report
Before You Buy/Plant your Crop

1. Farmers grow crops to make money and support themselves and their families.

2. Farmers pick crops adapted to their area because adjusting the climate/soil to help non-native plants thrive in a non-ideal location increases production costs and decreases profit.

## Crop Report

(Covering the reporting period January - December 2015)

Crop production on Coachella Valley land irrigated with Colorado River water

- **Value of year's production:** $745,704,920
- **Total acreage irrigated (includes double cropping & irrigated but not harvested):** 70,470
- **Average gross value per acre:** $10,280

<table>
<thead>
<tr>
<th>Crop</th>
<th>Acreage</th>
<th>Yield in tons</th>
<th>Value per acre</th>
<th>Total value</th>
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<tr>
<td><strong>Fruit</strong></td>
<td></td>
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<td>Dates</td>
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<td>207,588</td>
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<td>Figs</td>
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<td>Grapes - (table)</td>
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<td>1,487</td>
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<td>62,520</td>
<td>$20,587</td>
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<td>Lemons &amp; Limes</td>
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<td>Mangos</td>
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<td>Olives</td>
<td>117</td>
<td>954</td>
<td>$15,485</td>
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<td>Oranges &amp; Tangerines</td>
<td>86</td>
<td>765</td>
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<td>Peaches</td>
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<td>Strawberries</td>
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<td>Watermelon</td>
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<td><strong>Total</strong></td>
<td>26,332</td>
<td>554,724</td>
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<td><strong>Vegetables</strong></td>
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<td>Artichoke</td>
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<td>Basil</td>
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<td>Green Bean</td>
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<td>5,463</td>
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<td>Bok Choi</td>
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<td>Broccoli</td>
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<td>Cabbage</td>
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<td>Carrots</td>
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<td>Cauliflower</td>
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<td>Celery</td>
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<td>Eggplant</td>
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<td>Lettuce</td>
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<td>Onion - Dry</td>
<td>60</td>
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<td>Onion - Green</td>
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<tr>
<td>Oriental Vegetables</td>
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<td>Peppers (bell)</td>
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<td>Peppers (chili)</td>
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<td>Potatoes</td>
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<td>Radish</td>
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<td>Spice</td>
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<td>3,819</td>
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<td>Spinach</td>
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<td>Squash</td>
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<td>Tomatoes</td>
<td>255</td>
<td>5,064</td>
<td>$11,876</td>
<td>$3,028,451</td>
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</tbody>
</table>
NOT ALL CITRUS THRIVE IN THE DESERT

There are many varieties of citrus trees available, but not all of them do well in the desert. Furthermore, some of the Mandarins (Tangerines) and Tangelos need a different citrus pollinator tree to produce well. Following is a partial list of desert-compatible favorites.
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Ruby Red Grapefruit

(Also Marsh and Oroblanco)
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Navel (Eating) Orange

Hamlin Orange
Valencia (Juice) Orange
(Olinda and Campbell)
Blood Orange: Mora
Blood Orange
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Mandarins: Alternate Bearing and Likes a Pollinator (Tangelo)
Also Fairchild and Kinnow

Clementine (Halos/Cuties)  Dancy
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Alternate Bearing and Likes a Pollinator (Mandarin)

Orlando

Minneola
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Meyer Lemon  (Also Lisbon and Eureka)
Meyer Lemon: Fruit
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Limes

Mexican (Key Lime)  Bearss (Persian)
CITRUS FOR THE LOW DESERT

The Grapefruits
The Oranges
The Mandarins (Tangerines)
The Tangelos
The Lemons
The Limes
The Kumquats
Kumquats: Negami
Don’t forget the Dwarfs
Which one should I choose ????
PICK OUT THE RIGHT TREE

See pages 6-7 of Citrus Fruit for Home Planting (Posted on CVWD website)

Young trees are best (1-2 years)

a) 1 year old tree: \( \frac{1}{2} \) to \( \frac{3}{4} \)” diameter at 1” above the bud union.

b) 2 year old tree: \( \frac{3}{4} \)” to 1” diameter at 1” above the bud union.
Bud Union

Scion (Fruit Bearing) --->

Rootstock (Wild and Tough) --

14" - 16" (Width)  
16" - 18" (Depth)
Bud Grafting
Graft sealed by wax (or tape)
Citrus Bud Union
PICK OUT THE RIGHT TREE: II

Now that you know what the bud union is and where it is located on your tree, I repeat:

Young trees are best (1-2 years):

a) 1 year old tree: ½ to ¾” diameter at 1” above the bud union.

b) 2 year old tree: ¾” to 1” diameter at 1” above the bud union.

In addition: No fruit on tree and no thick roots protruding from pot’s drain holes.
Older trees left in nursery containers become root-bound.
If root bound, score roots to break the circling
Plant in the Right Place at the Right Time.


2. The tree will need full sun: Minimum 8 hours/day

3. Drainage: Before planting, fill the planting hole with water + “transplant” fertilizer at day’s end. The next morning, the water should be drained. If so, you’re ready to plant.

4. Timing: Best time is March/April after frost danger has passed.
“Quick Start” Planting fertilizer
Plant Correctly

1. See illustration on page 8 of Citrus Fruit for Home Planting (Posted on CVWD website)
2. Don’t plant too deep.
3. Don’t add fertilizer or organic matter to the backfill.
4. Loosen the soil around the planting hole in a 2’ wide ring with a spading fork.
5. After planting, Mulch the planting hole and loosened soil with 2” of bark or other organic mulch material. Leave a 6” ring of bare soil around the trunk.
Spading Fork in Action Loosens Soil
Wrap to prevent sunburn

Bordeaux paint here

First roots branch here

Basin for water

Soil level

Burlap sacking folded back

Tamp soil firmly around ball

Ball resting on firm soil to avoid settling

PLANT IT CORRECTLY
Mulching Citrus out to Drip Line
Don’t Prune Your Citrus Trees to Look Like These Peach Trees: You Can’t Train/Shape Citrus
Minimize Pruning

1. Understand Apical Dominance
   (The top bud rules).

2. Remove rootstock suckers, but pull out scion suckers through the side of the canopy.

3. Leave as much green wood on the scion as possible. Skirt should touch the ground. No lollipops.

4. Remove dead wood, broken branches and cross-overs.

5. Use silver duct tape to cover large cuts.
Rootstock Suckers (Remove)
Lollipop Citrus Tree
Full Skirt: Maximum Yield
Cross-Over
Dead Wood
Protect the Trunk

1. Citrus trees are very susceptible to sunburn
2. Use tree wrap on newly planted trees. (See Pg 8: of Citrus Fruit for Home Planting (Posted on CVWD website).
3. Mature trees: If trunk is exposed, paint tree truck and primary scaffolds with a white, water-based or latex paint. NOT Oil-Based or enamel !!
4. See handout.
Painted Citrus Tree
Irrigate Properly

1. You can use basins (Page 9 of Citrus Fruit for Home Planting: Posted on CVWD website), bubblers, drip, micro-spray or spray head sprinklers.
2. Water out to the drip line.
3. Water deeply, but infrequently.
4. Water down to 3’ each time. One inch of water will penetrate down to 18” on sand.
5. Water when the first ¼ inch of surface soil is dry.
6. See Gallons per Day handout.
Water-Stressed Tree
Spread out your Emitters/Microsprays to Cover at Least 70% of the Under Canopy Area

Tubing was later covered with Mulch to hide.
Fertilize Properly

Use a citrus fertilizer. Make sure it has Nitrogen, Iron, Manganese and Zinc.

Fertilize 3 X a year (Jan/Feb, Apr/May and Aug/Sept) at the dose recommended on the label for the tree’s size.

Sprinkle fertilizer material as directed and water-in immediately.

Don’t plant into lush turf grass. Mulch out to drip line.
Eliminate Nutrient Competitors
Adequate Nutrition
Pest/Frost Control

See Page 14 of Citrus Fruit for Home Planting for disease prevention.

Be on the lookout for the Asian Citrus Psyllid and Huanglongbing (HLB) disease. See Handout.

See Page 16 of Citrus Fruit for Home Planting for Insect/Mite control.

I use Neem Oil Extract for both insect and disease problems (Read the label before applying).

See Page 10 of Citrus Fruit for Home Planting for frost control and Pages 16-17 of Citrus Fruit for Home Planting for frost damage control.
Harvest

Best place to store citrus is on the tree.

BUT

Remove all old (Old means poor quality) fruit from the tree once over-ripened and before next bloom to maximize fruit set.

Wear soft gloves when harvesting to keep fingernails off the rind.

If fruit does not pull off easily, clip/cut citrus from tree instead of pulling fruit off – Especially mandarins and tangelos.
CITRUS CARE FOR THE LOW DESERT

Thank You!

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