



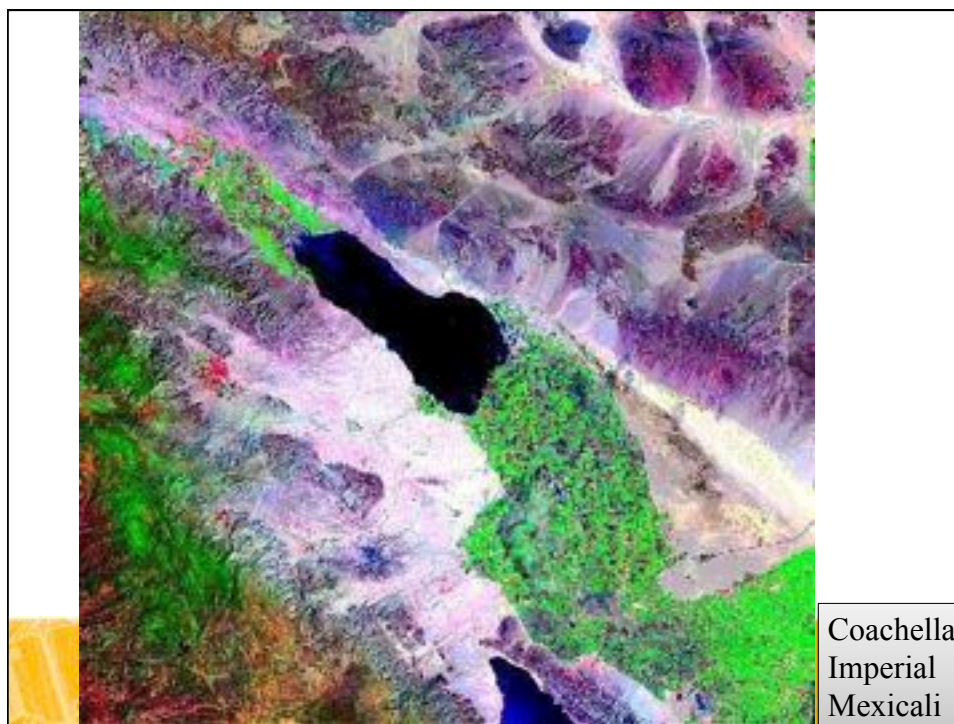
## Can the plants survive and produce fruit in the Coachella Valley?

- ✓ Exposure to prolonged high heat
  - ✓ Exposure to frost
- What are the Diseases?  
What are the Insect problems

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## Varieties

- 14: Haley's Comet
- 15: Physical Graffiti
- 9: Valdivia Roja
- 18: Seoul Kitchen
- 3: Orejona

## Observation Varieties

- 6: San Ignacio
- 1: Cebrea
- 5: Sin Espinas
- 10: Bien Hoa Red

All cuttings supplied by Ramiro Lobo

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## Methods and Materials

Varieties selected for heat tolerance

4 Varieties, 5 replications:

3 foot plant spacing,

5 plants per plot

Drip irrigation

Planted 4-11-2012

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## Trellising

Grape Posts

Posts are 2 feet deep and 6 feet above ground

Posts are 18 foot center to center

Grape wire is put at 1 foot spacing up the post

Rows are 12 foot center to center

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Planted 4-11-2012



May 16, 2012



## Problems in establishment

All the varieties had sunburn problems,  
Squirrels and gophers loved the roots,

Consequently the varieties remained thin  
And never developed into the thick trunks

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## June 2013

Least to most sun burn tolerant:

- |                       |  |
|-----------------------|--|
| 9: Valdivia Roja:     | not adaptable to open field plantings    |
| 3: Orejon             | not adaptable to open field plantings    |
| 18: Seoul Kitchen     | may be adaptable to open field plantings |
| 14: Haleys Comet      | may be adaptable to open field plantings |
| 15: Physical Graffiti | may be adaptable to open field plantings |

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## Temperature Range

Ideal growing temperature for dragon fruit is 65 to 77 degrees.

Florida Extension reports that plants are subject to freezing or frost, and can tolerate warm climates where temperatures **do not exceed 100F.**

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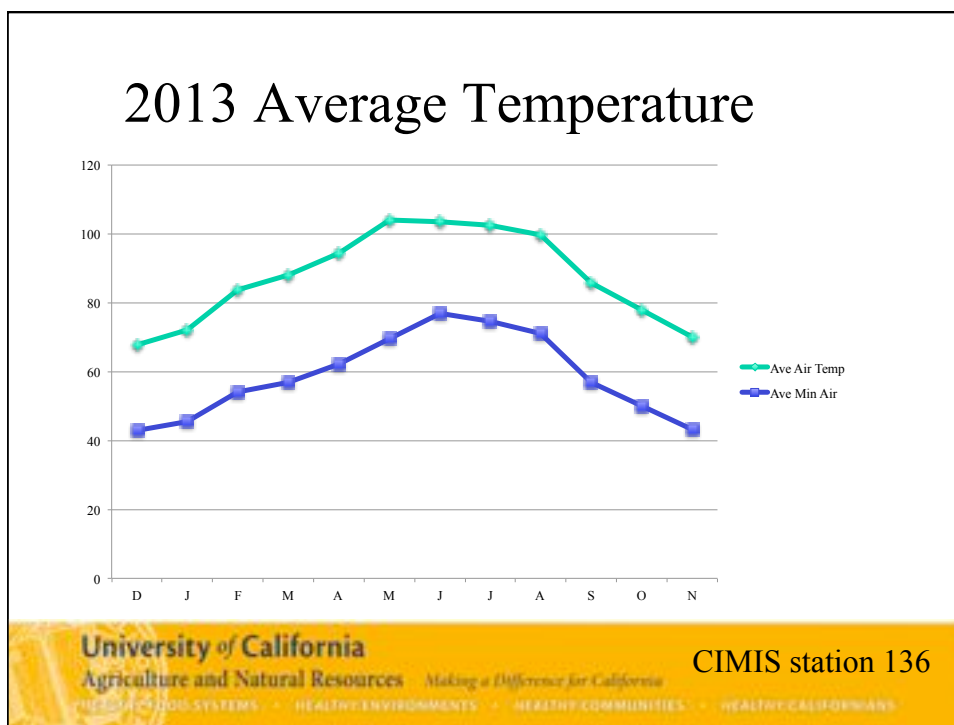
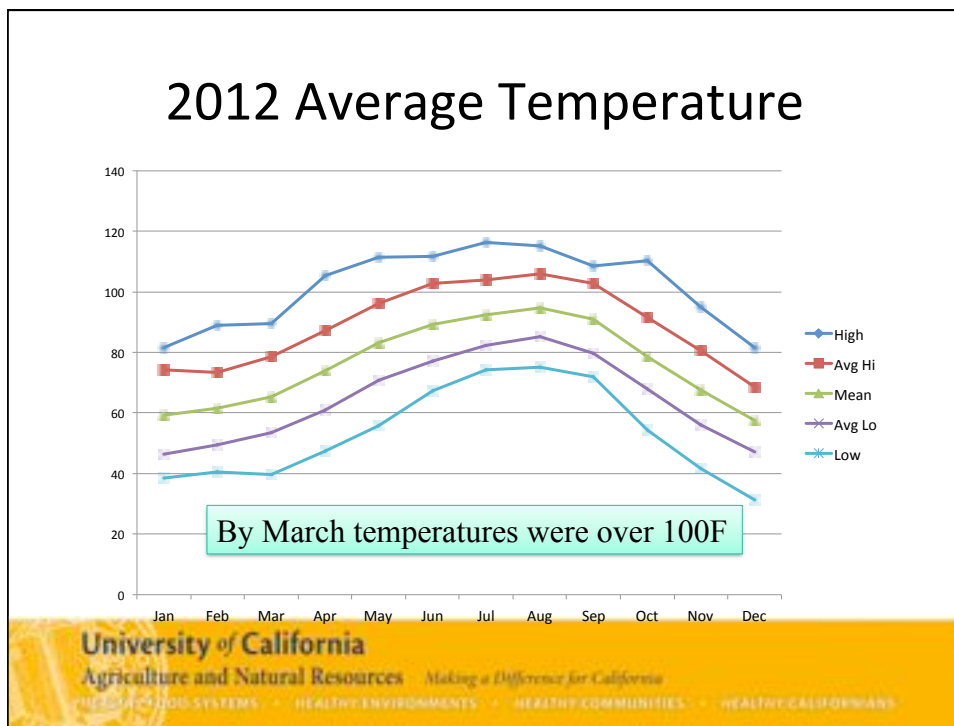
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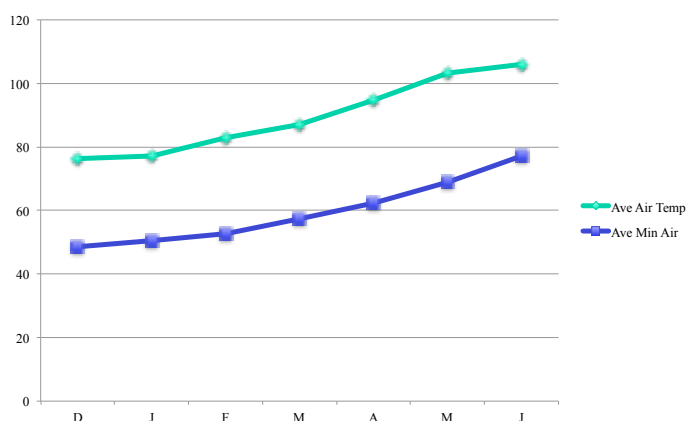


### CIMIS Station #136 in Oasis





## 2014 Average Temperature



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CIMIS station 136

## Can Pitahaya be grown in the Coachella Valley?

They will need to be grown under shade cloth for part of the growing season

Begin plantings with larger cuttings so that they establish faster

Irrigation has been problematic, too little the plants dry out,

Too much the plants rot

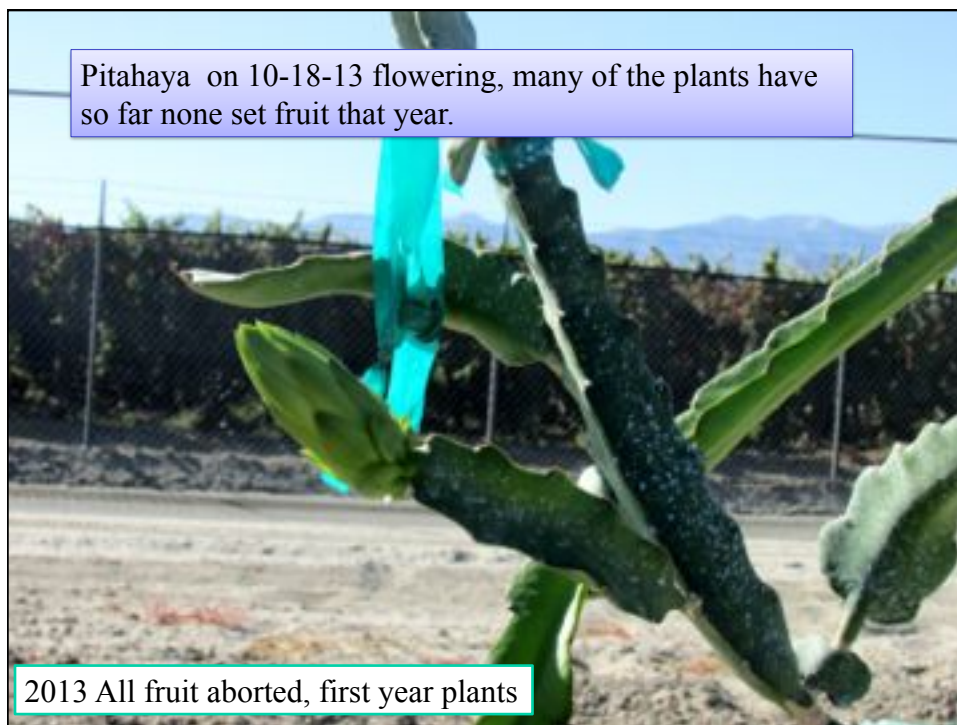
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Pitahaya cuttings do really well in shade house



Pitahaya on 10-18-13 flowering, many of the plants have so far none set fruit that year.

2013 All fruit aborted, first year plants

2014: 3 plants set small fruit in the second year!  
But many had very small flowers that aborted

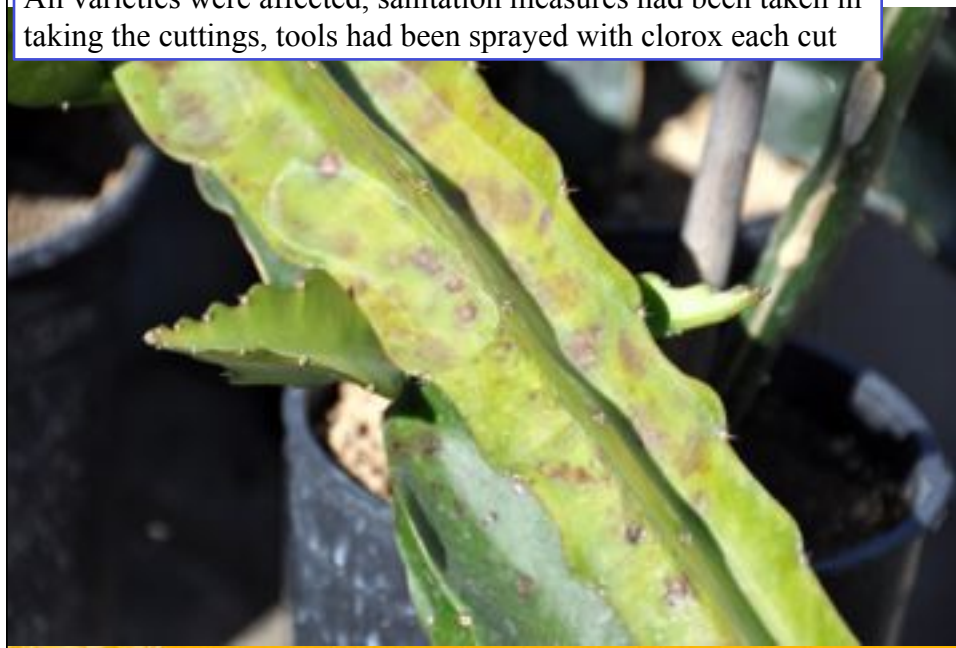


A problem began in January 2014



I assumed it was frost damage, but it wasn't frost damage

The problem began to spread to all cuttings in the shade house  
All varieties were affected, sanitation measures had been taken in  
taking the cuttings, tools had been sprayed with clorox each cut



Eventually leading to a rot of the tissue

