

# UV treatment for control of Powdery Mildew in Strawberry

11 September 2020

Clare Taylor



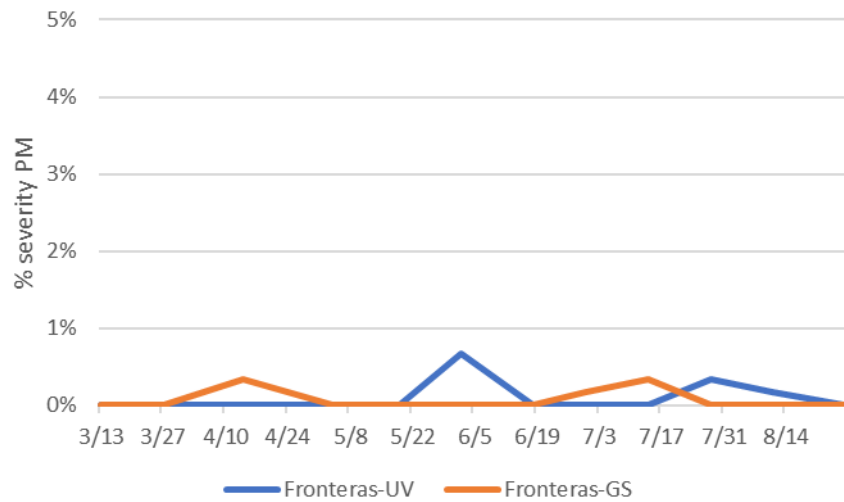
# Treatment List

- UV = UV applied 2x per week
  - 2.52 MPH = UV dose  $200\text{J}/\text{m}^2$
- GS = Grower Standard including commercial standard sprays for mites and mildew
- UTC = Untreated Check
  - 6 varieties were planted,
  - only one variety included UTC plots (not shown),
  - only 4 public varieties are presented here
- There were only 3 reps per variety x treatment combination

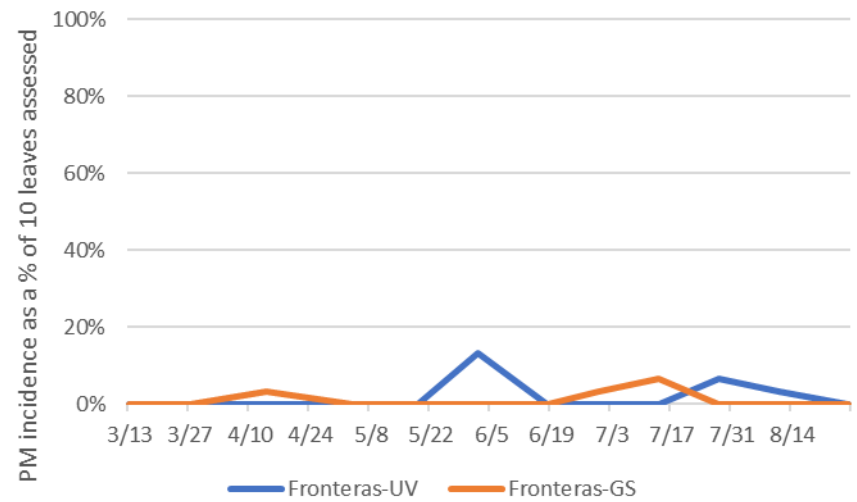
Powdery mildew severity and  
incidence on leaves:

# Fronteras

## Fronteras Powdery Mildew Severity

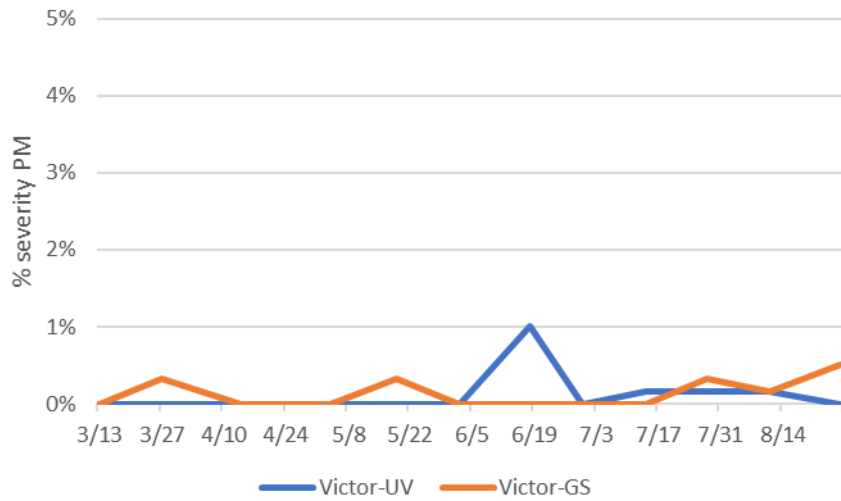


## Fronteras Powdery Mildew Incidence

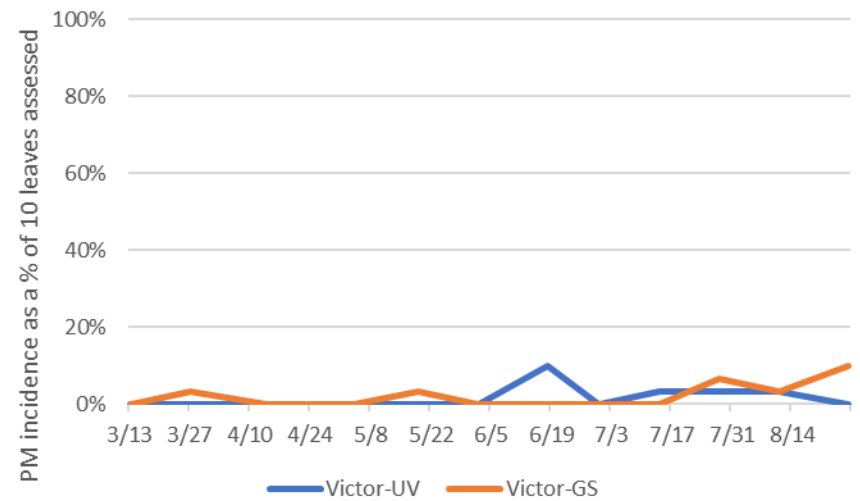


# Victor

### Victor Powdery Mildew Severity

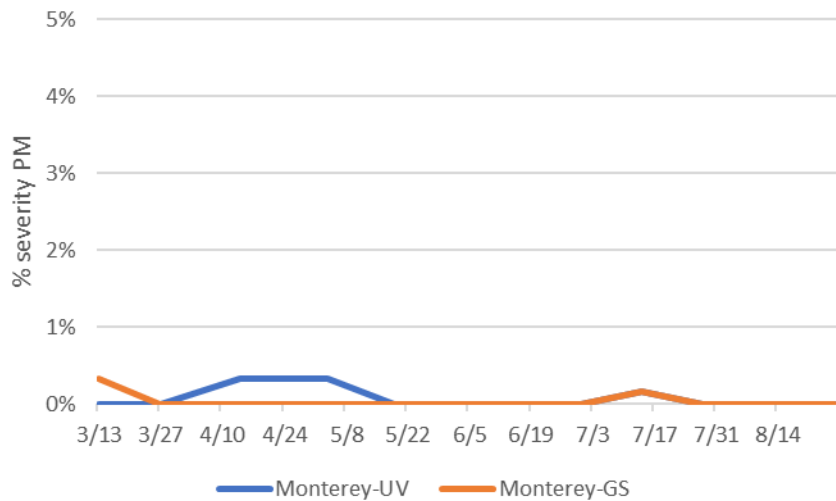


### Victor Powdery Mildew Incidence

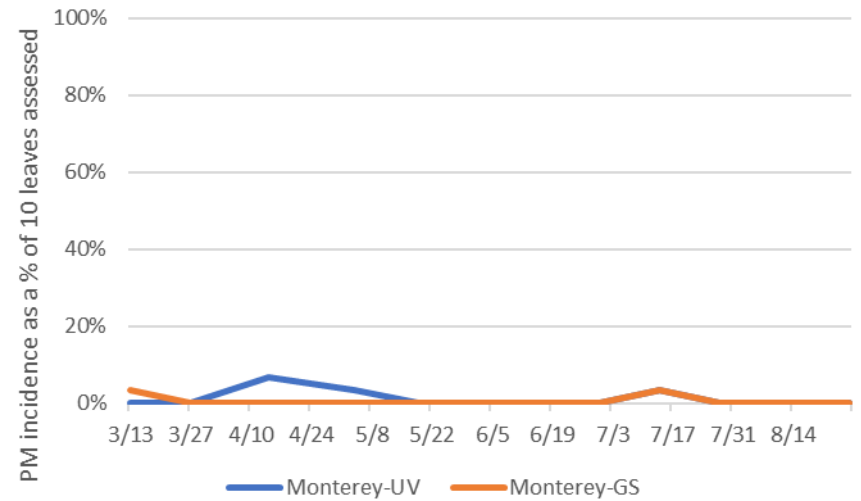


# Monterey

## Monterey Powdery Mildew Severity

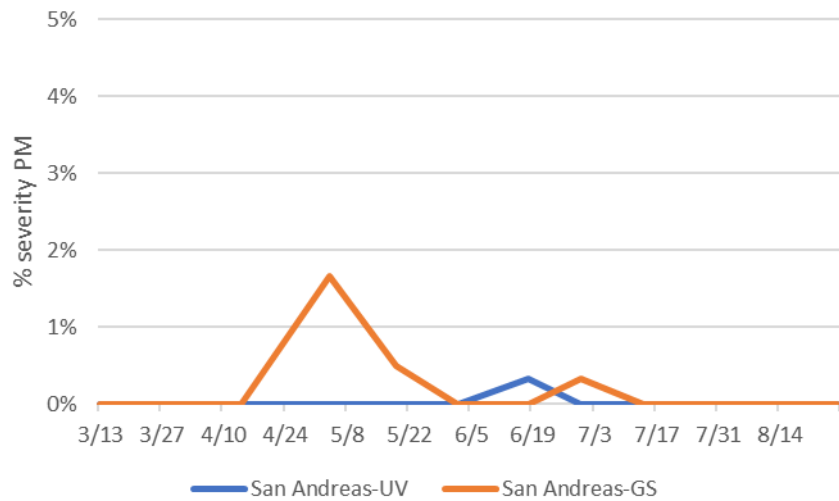


## Monterey Powdery Mildew Incidence

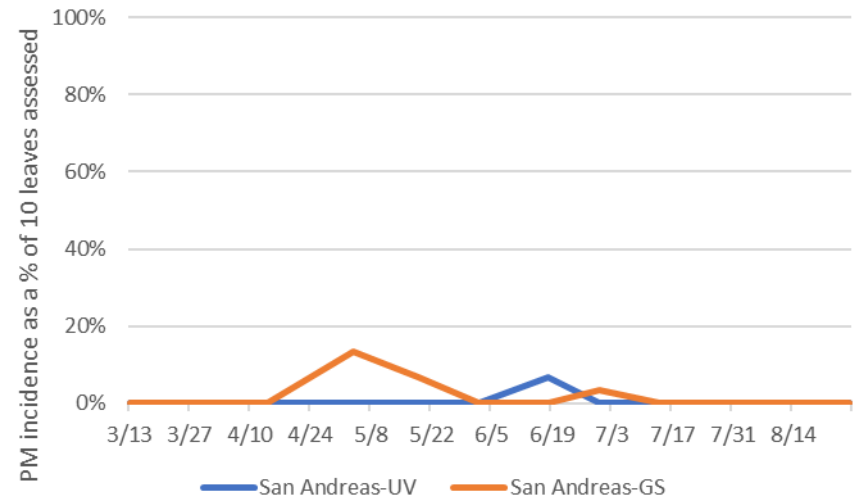


# San Andreas

## San Andreas Powdery Mildew Severity



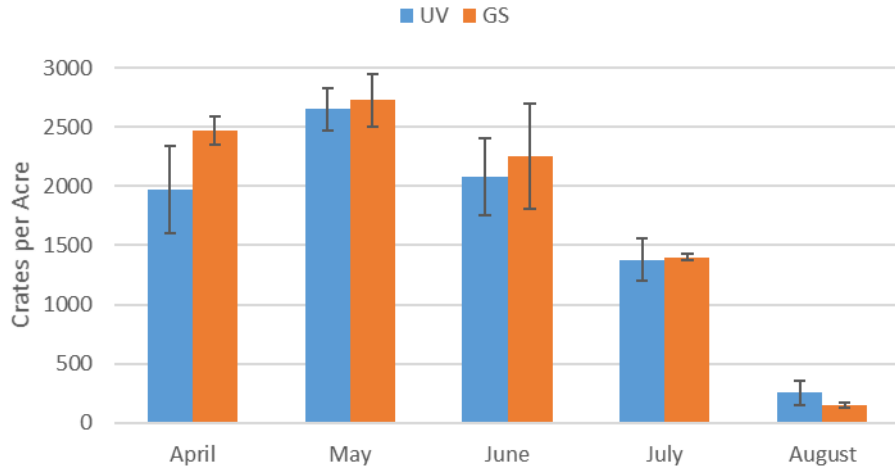
## San Andreas Powdery Mildew Incidence



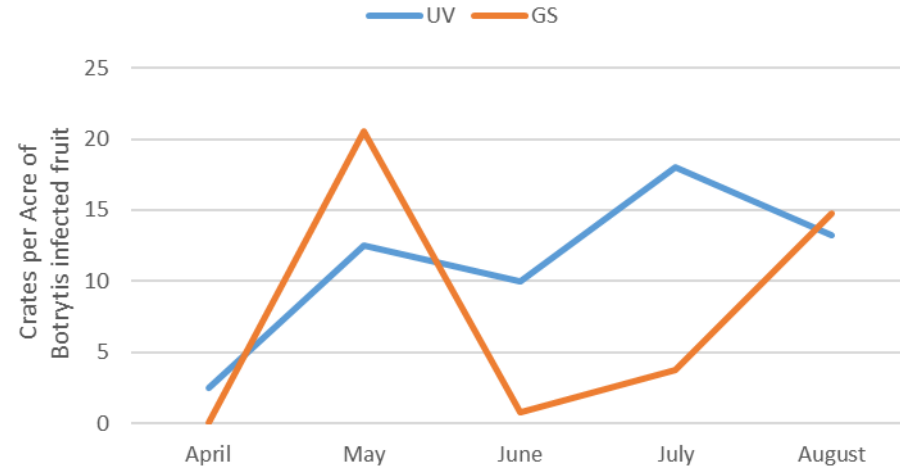
Yield data by variety:

# Fronteras

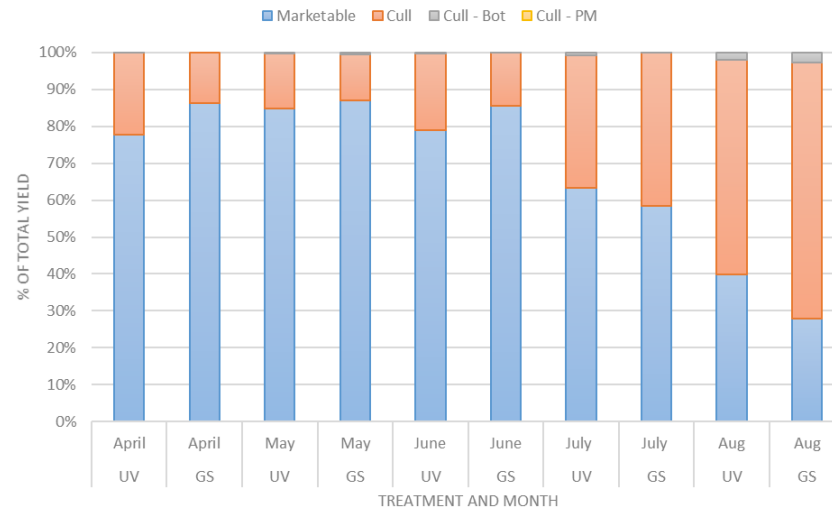
## Fronteras Marketable Yield



## Fronteras



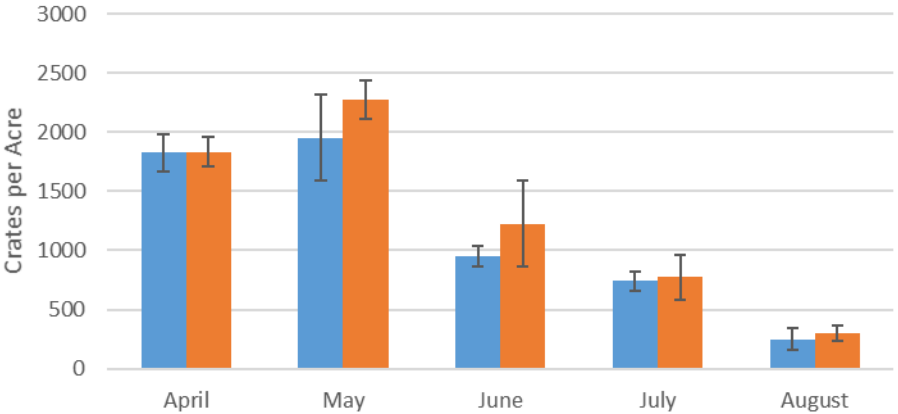
## Fronteras



# Victor

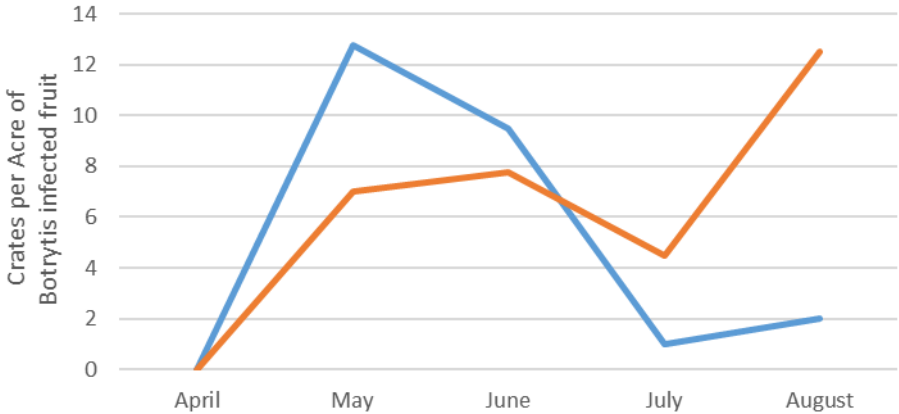
Victor Marketable Yield

■ UV ■ GS



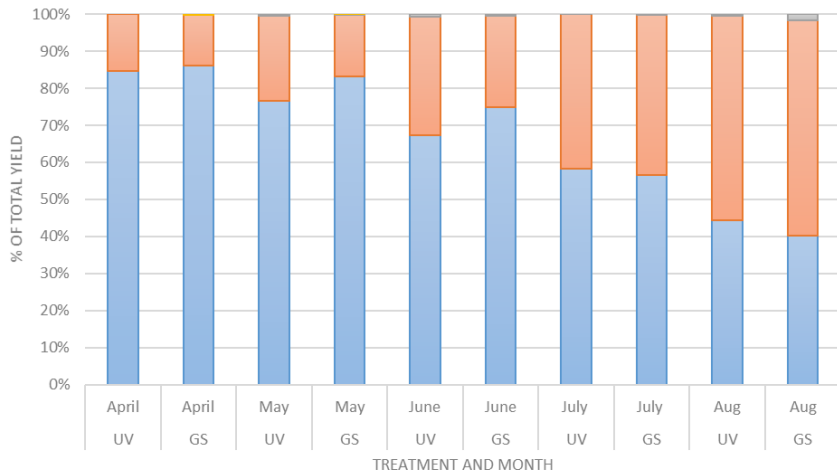
Victor

— UV — GS



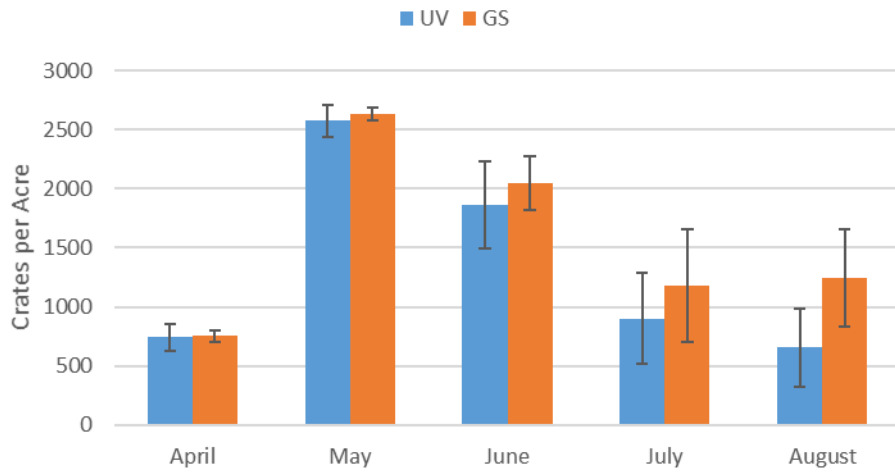
Victor

■ Marketable ■ Cull ■ Cull - Bot ■ Cull - PM

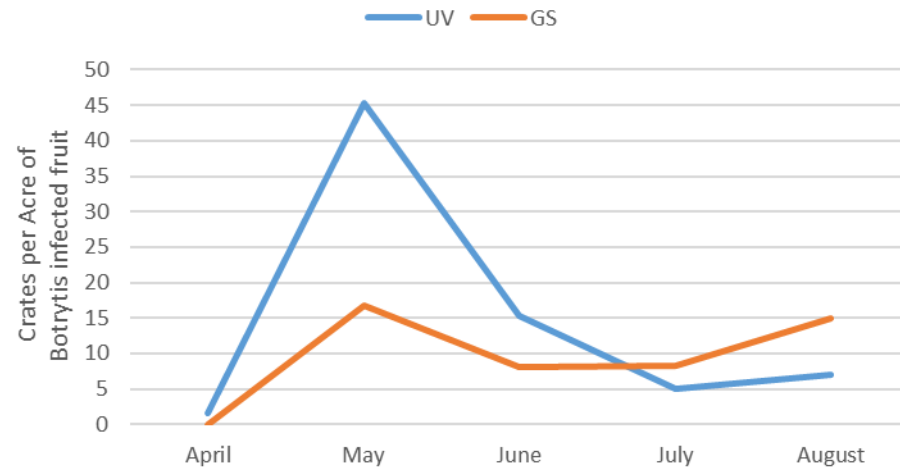


# Monterey

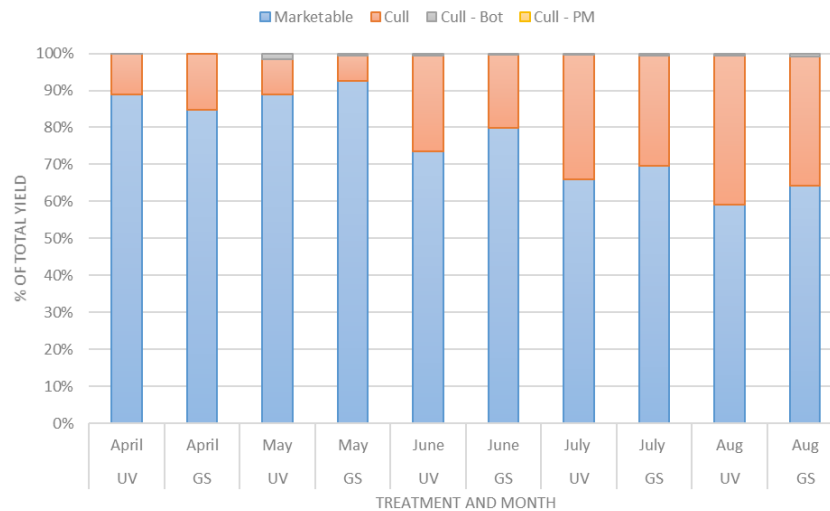
## Monterey Marketable Yield



## Monterey

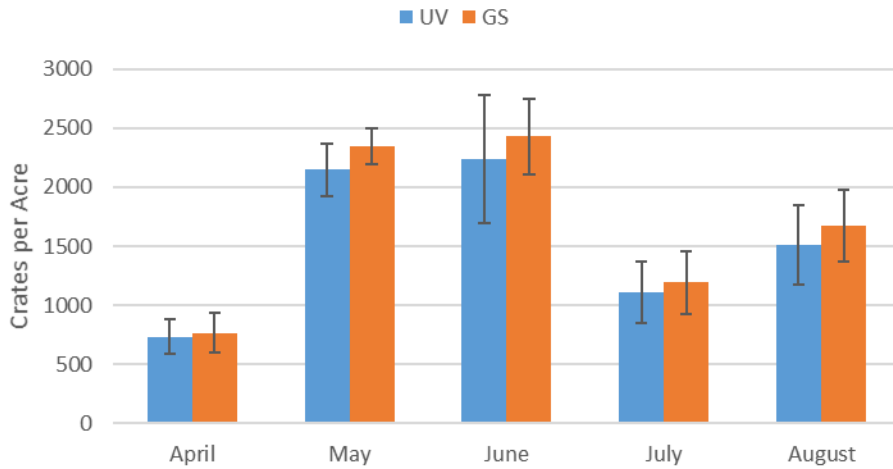


## Monterey

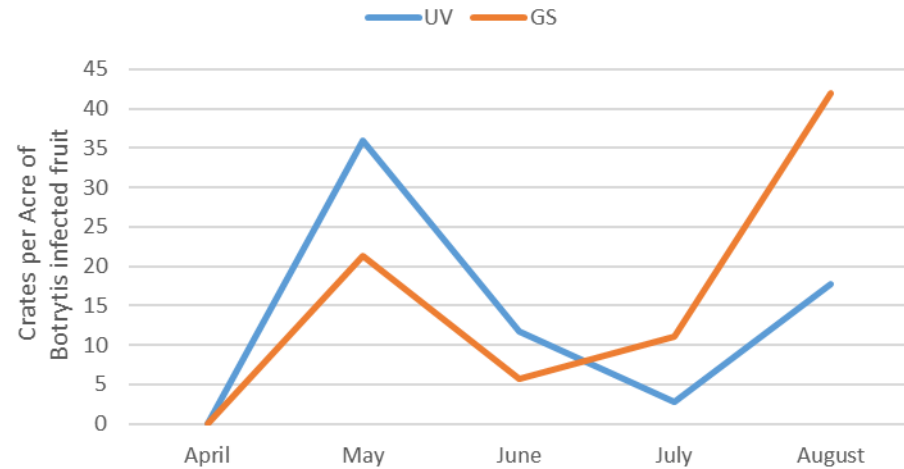


# San Andreas

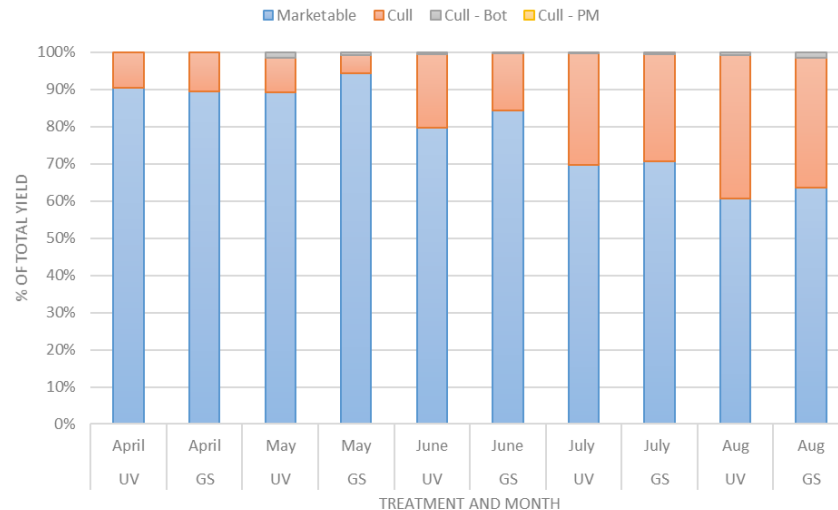
San Andreas Marketable Yield



San Andreas

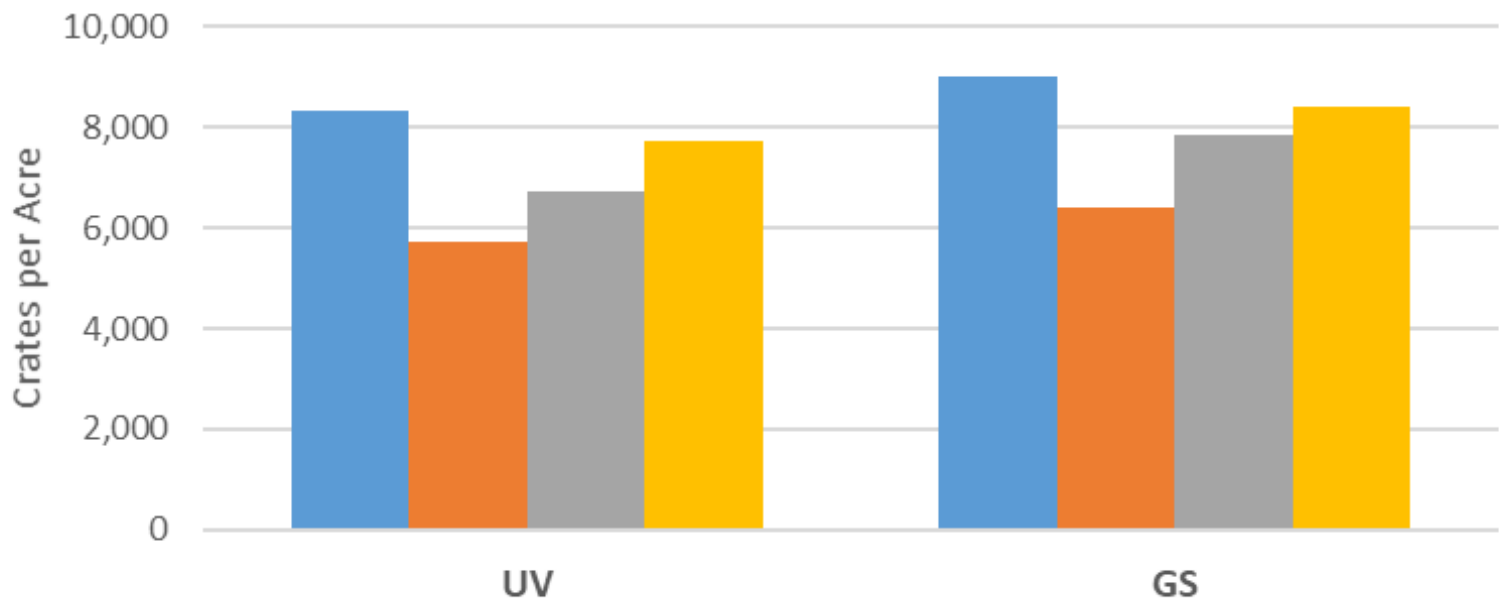


San Andreas



## Season Total Marketable Yield

■ Fronteras ■ Victor ■ Monterey ■ San Andreas



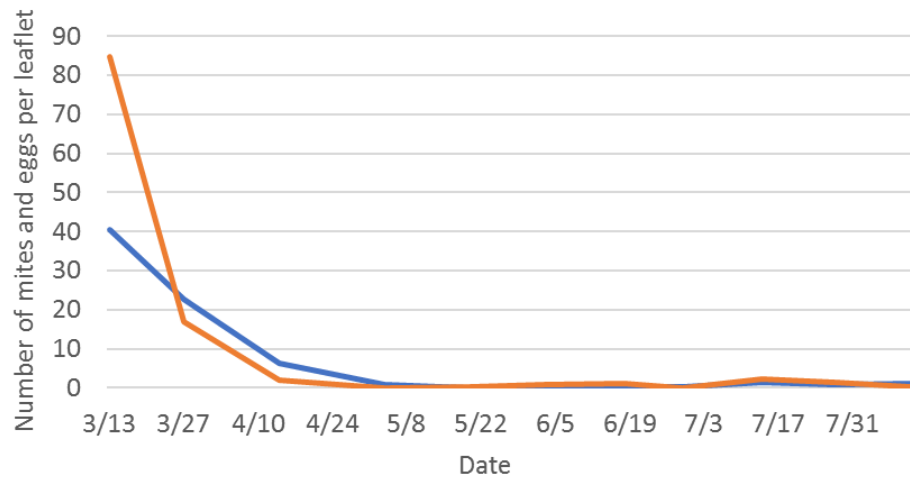
# Mite count data by variety

(note that this trial was not set up with an ideal experimental design for evaluation of motile pests and the differences shown are not statistically significant)

# Fronteras

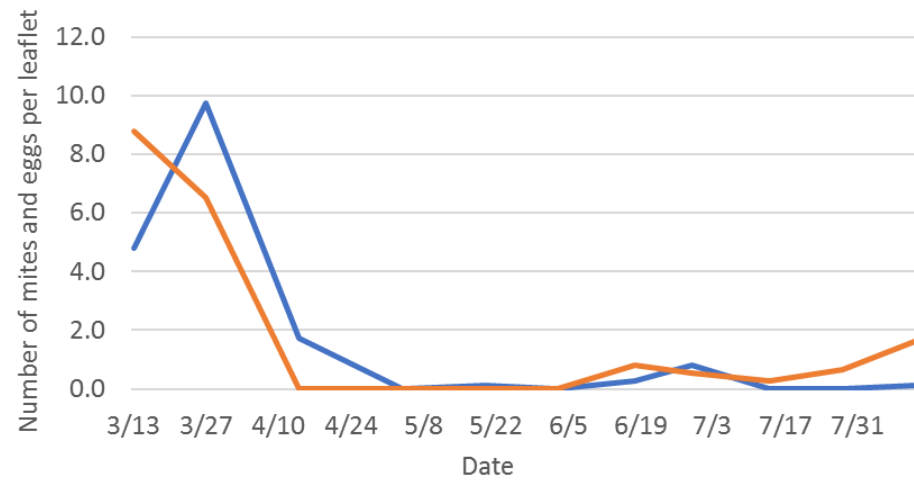
TSSM on Fronteras

— UV — GS



Lewis Mite on Fronteras

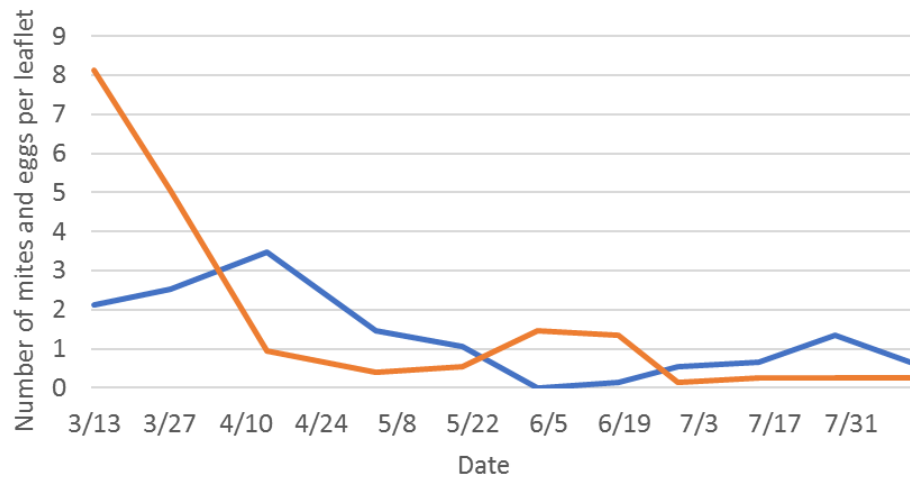
— UV — GS



# Victor

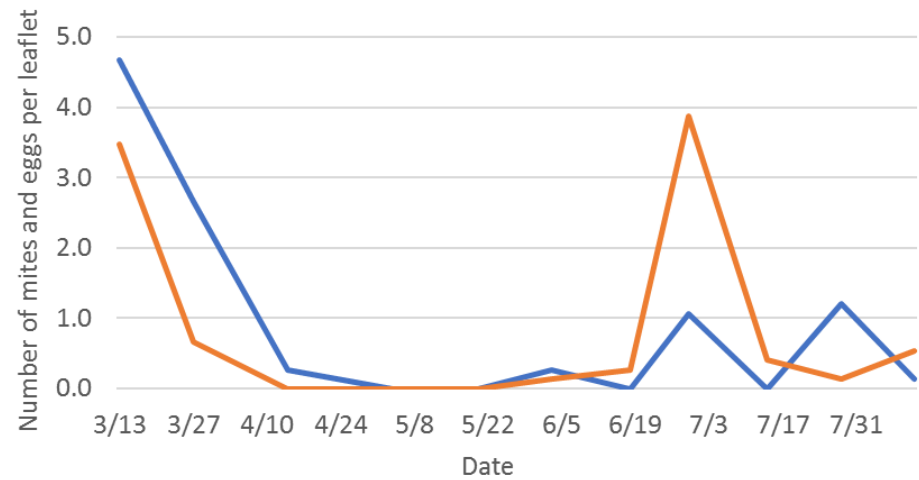
TSSM on Victor

— UV — GS



Lewis Mite on Victor

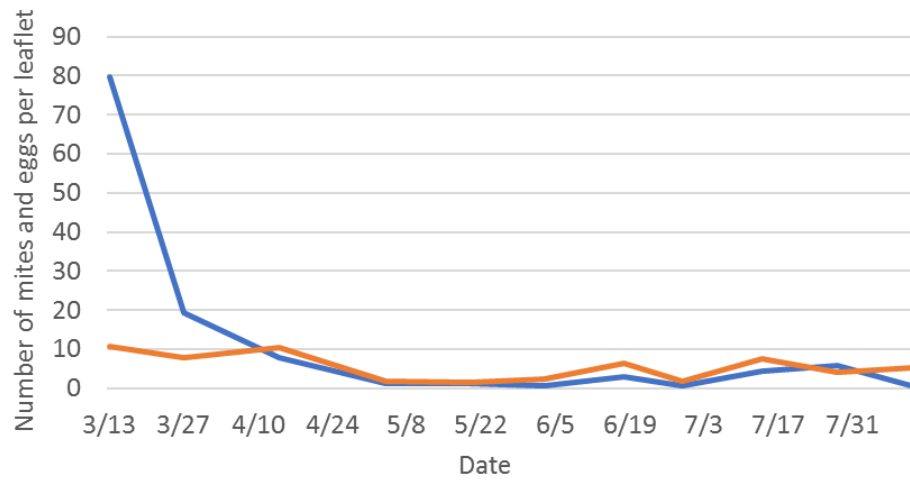
— UV — GS



# Monterey

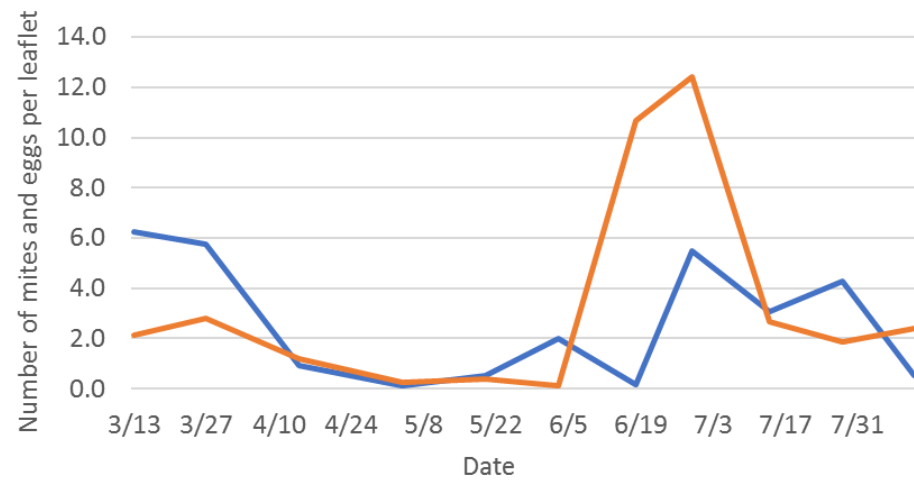
TSSM on Monterey

— UV — GS



Lewis Mite on Monterey

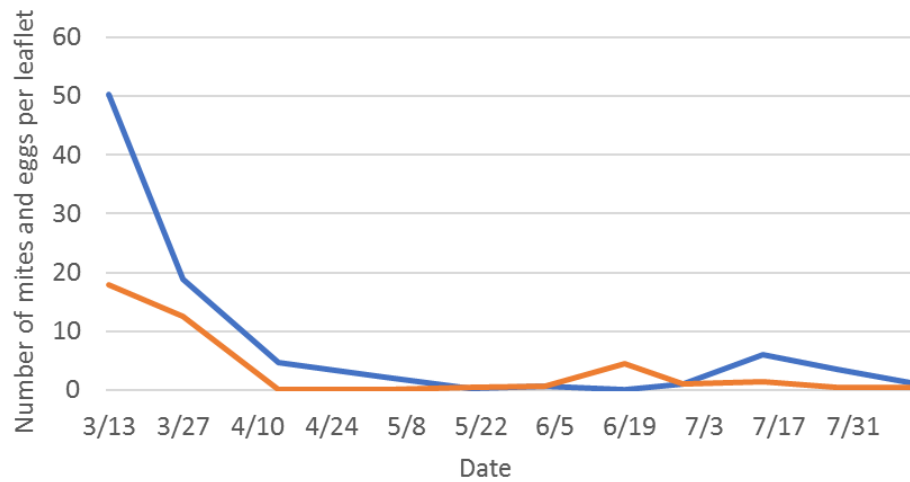
— UV — GS



# San Andreas

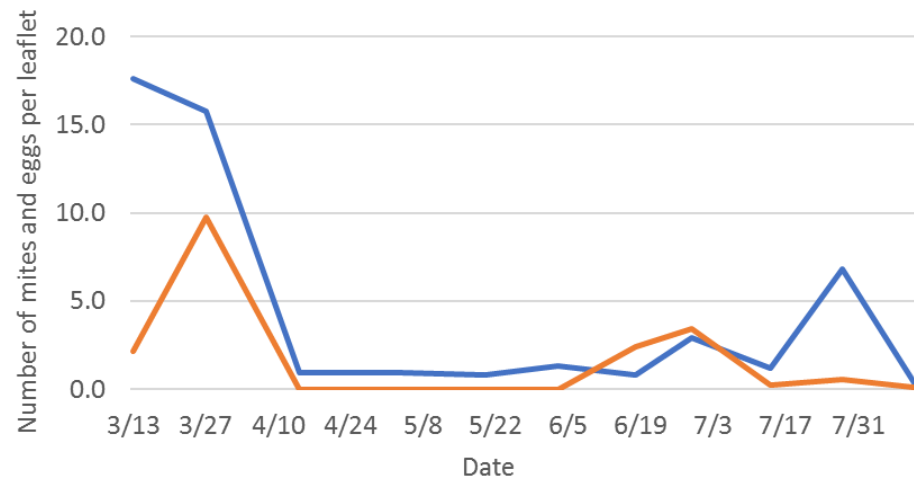
TSSM on San Andreas

— UV — GS

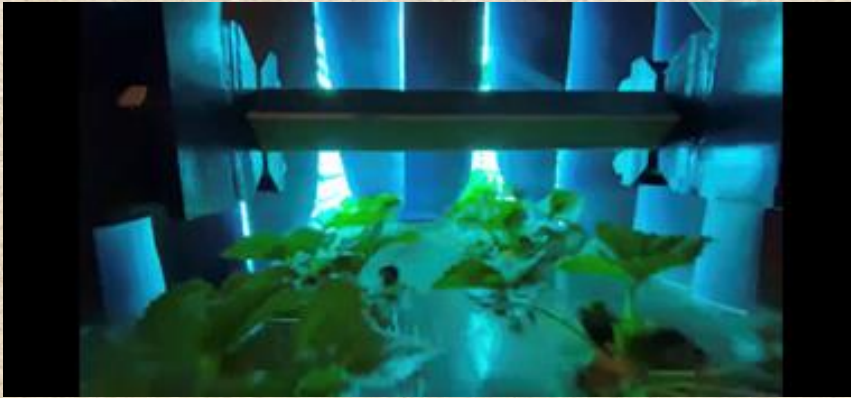


Lewis Mite on San Andreas

— UV — GS







^ This video still shows the strawberry plants as the UV passes over them, the reflective curtain keeps the UV in and gently disturbs the leaves

David Gadoury demonstrates proper PPE for work around the UV trailer >

