

**X Simposio Internacional de Mango**

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# Factors Affecting 'Omer' and 'Maya' Mango Production in Israeli Orchards

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# 'Omer'

- \* A new Israeli cultivar (first bred 10 years ago)
- \* Excellent taste
- \* Bright purple peel color
- \* Fruit can be stored at ~4 C for ~2 months



# 'Maya'

- \* An Israeli cultivar (first bred 60 years ago)
- \* Picked fully mature ("ready to eat")
- \* Excellent taste
- \* Attractive yellow-orange peel color
- \* The fruit is usually smaller than required

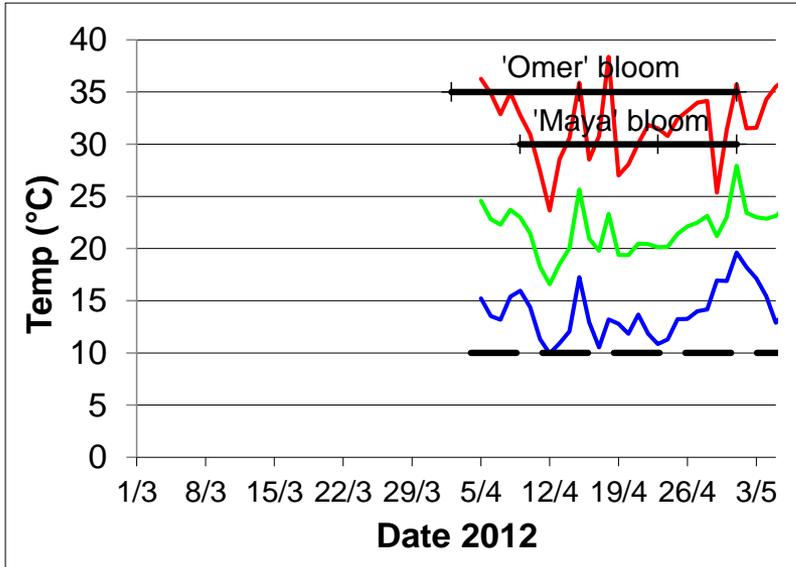
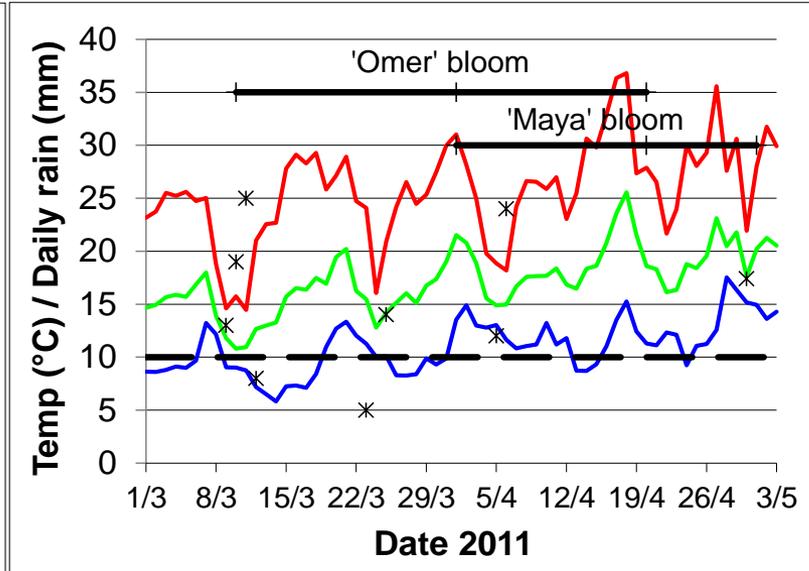
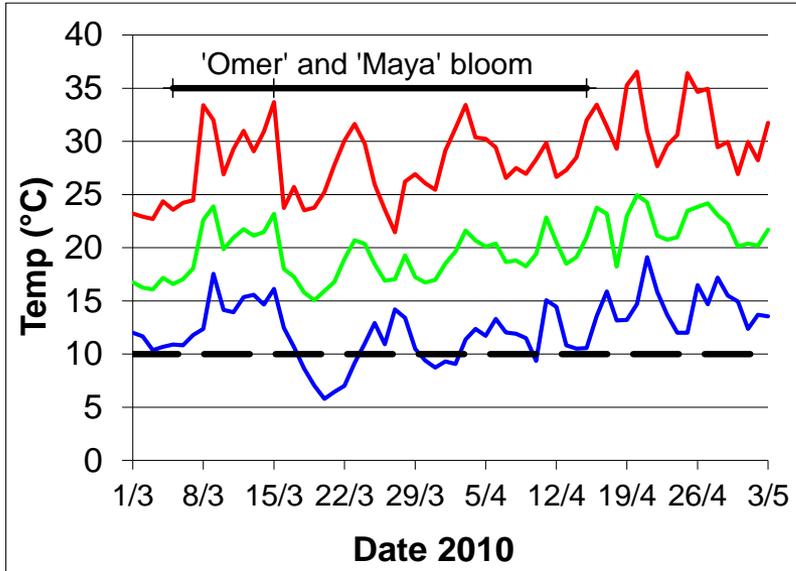


# The Orchards

- \* Mature orchards, located in the northern part of Israel
- \* Mediterranean subtropical weather conditions (cold and rainy winter and warm summer with no rain).
- \* Trees grafted on 13-1 rootstock
- \* Tree spacing 4 × 6 m (420 tree/ha)



# Phenology and Weather Conditions During Flowering

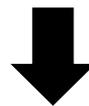
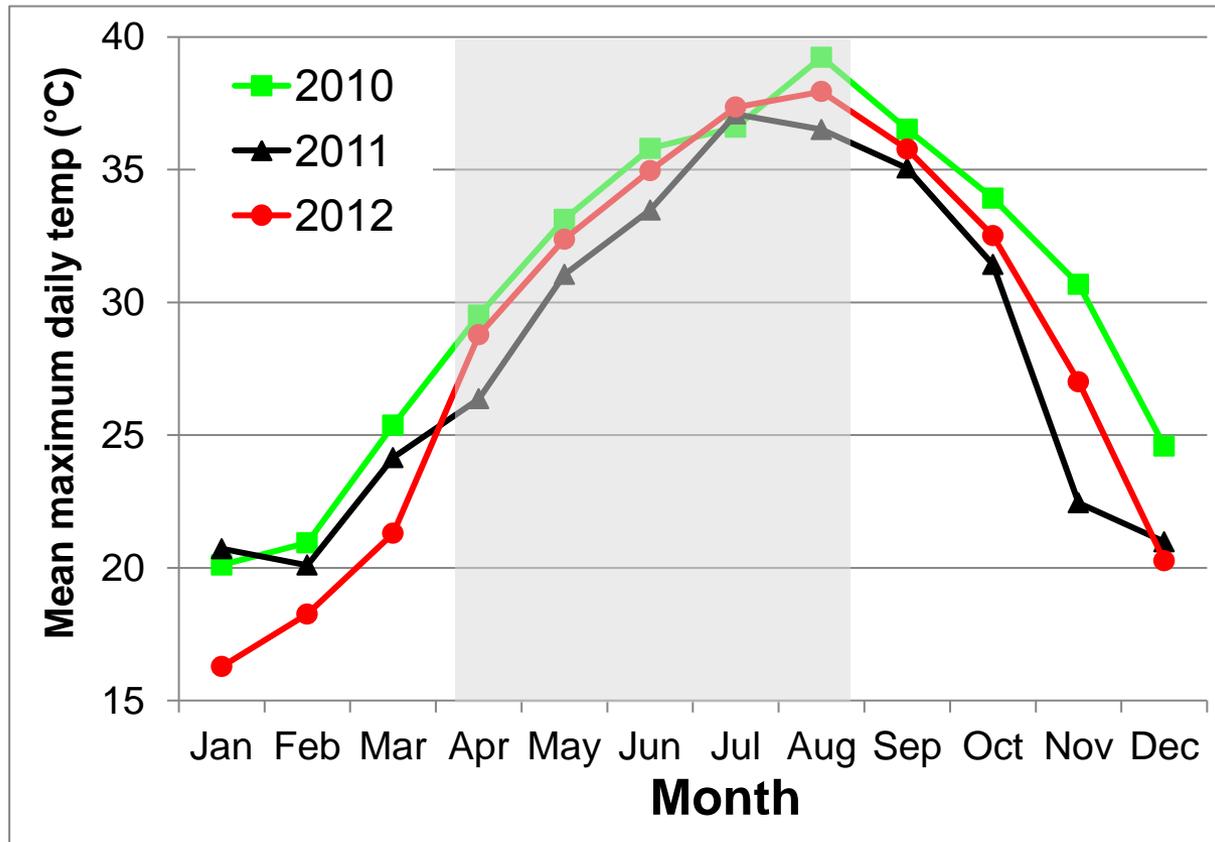


2010 = Cold in full bloom  
2011 = Rain  
2012 = Late and short season



Each season was different

# Weather Conditions During Fruit Development



Relatively low maximum daily temperatures during 2011 fruit development



Does the Bloom Date Affect  
Inflorescence Production?

# Does the Bloom Date Affect Inflorescence Production?

“Full bloom”  
Inflorescence

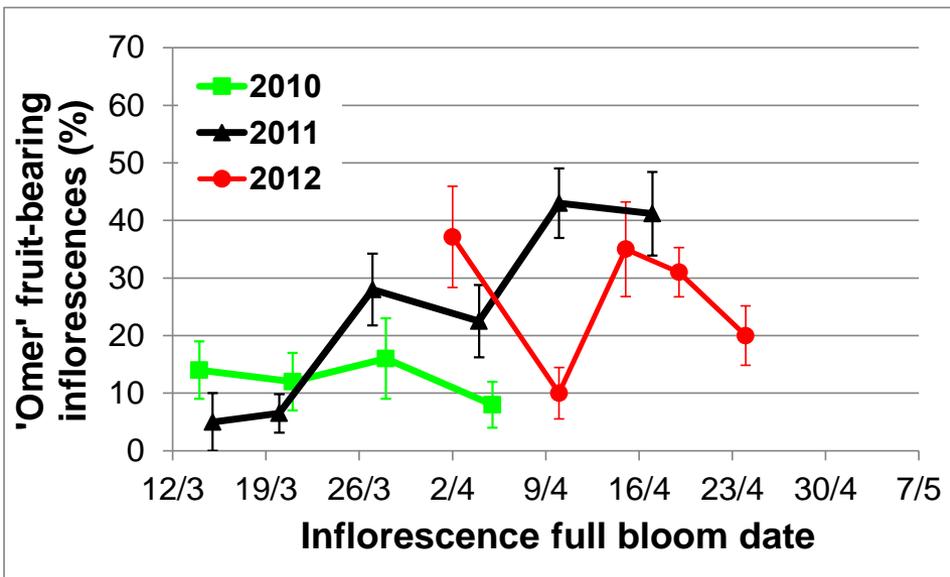


Inflorescence development

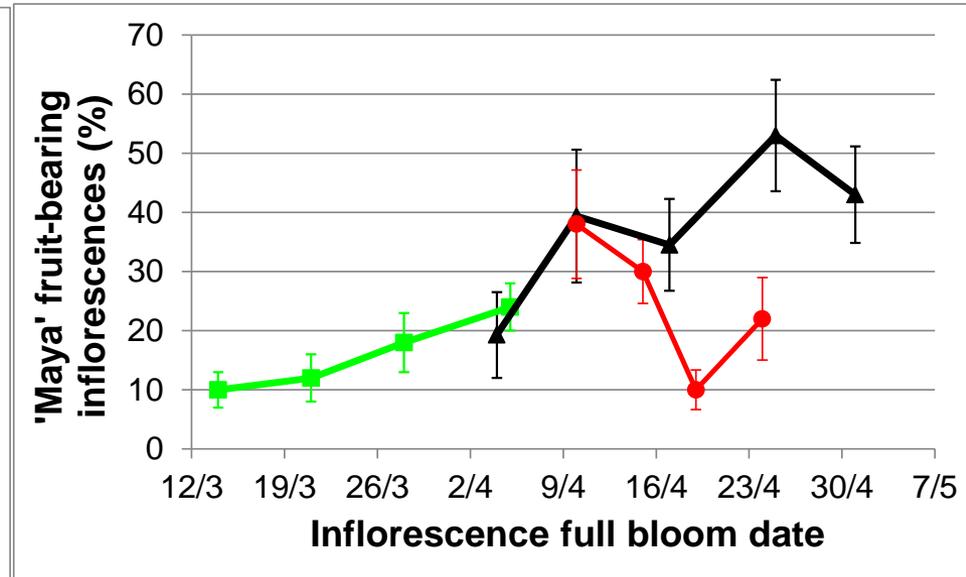


# Does the Bloom Date Affect Inflorescence Production?

## Omer



## Maya



No clear positive correlation between bloom date and inflorescence production

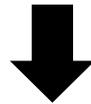
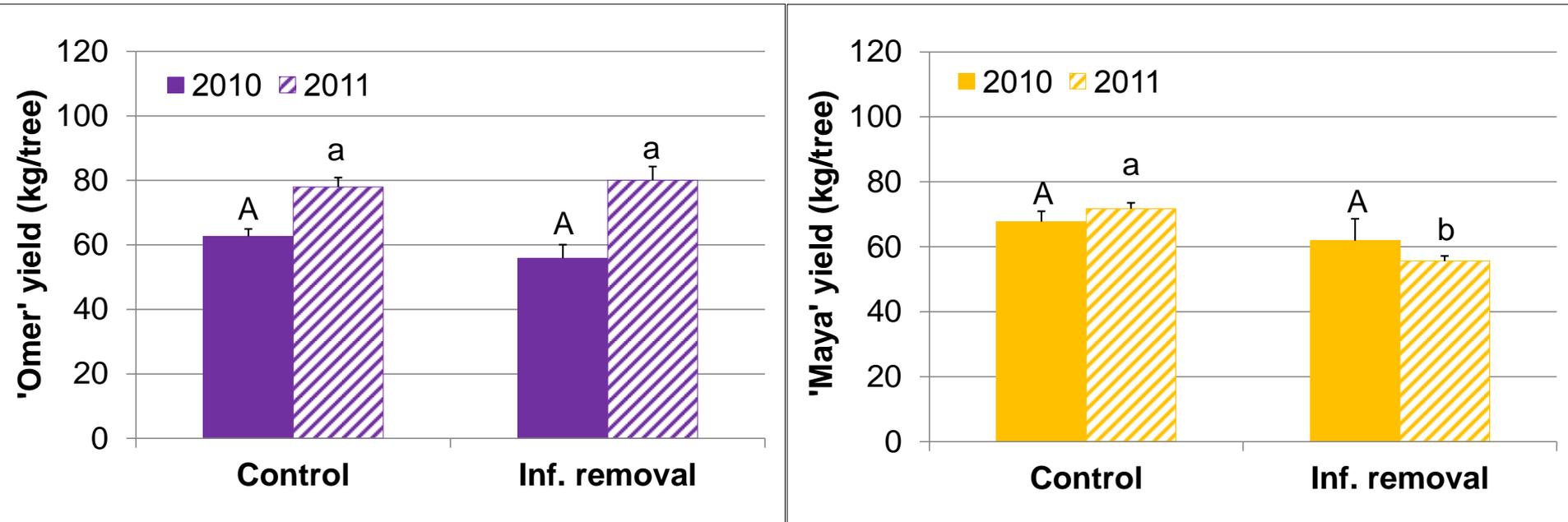


Does Early Inflorescence Removal  
Improve Productivity?

# Does Early Inflorescence Removal Improve Productivity?

Omer

Maya



Early inflorescence removal did not elevate productivity



Does Autumn Vegetative Shoot Growth  
Influence Fruit Load?

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No vegetative growth



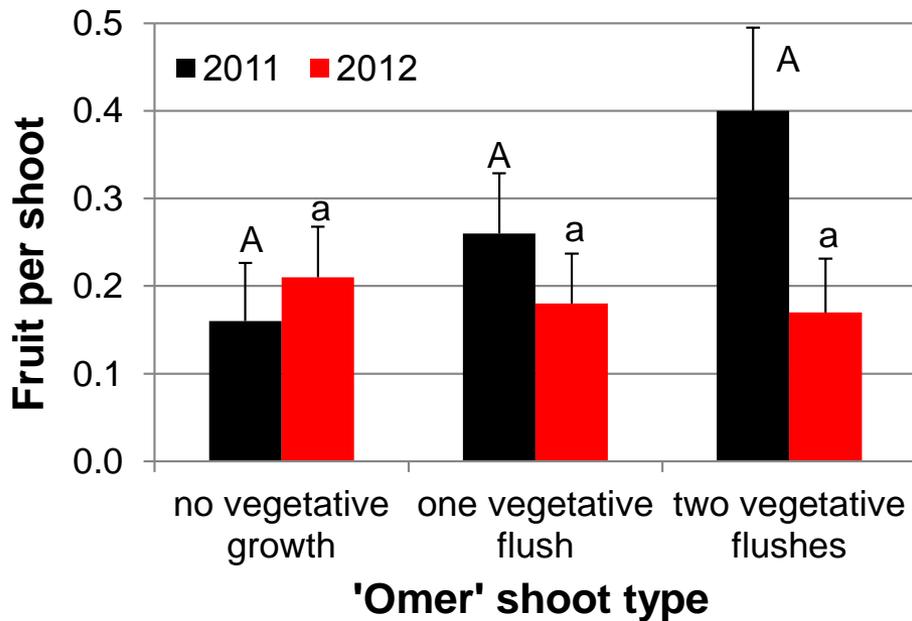
One vegetative flush



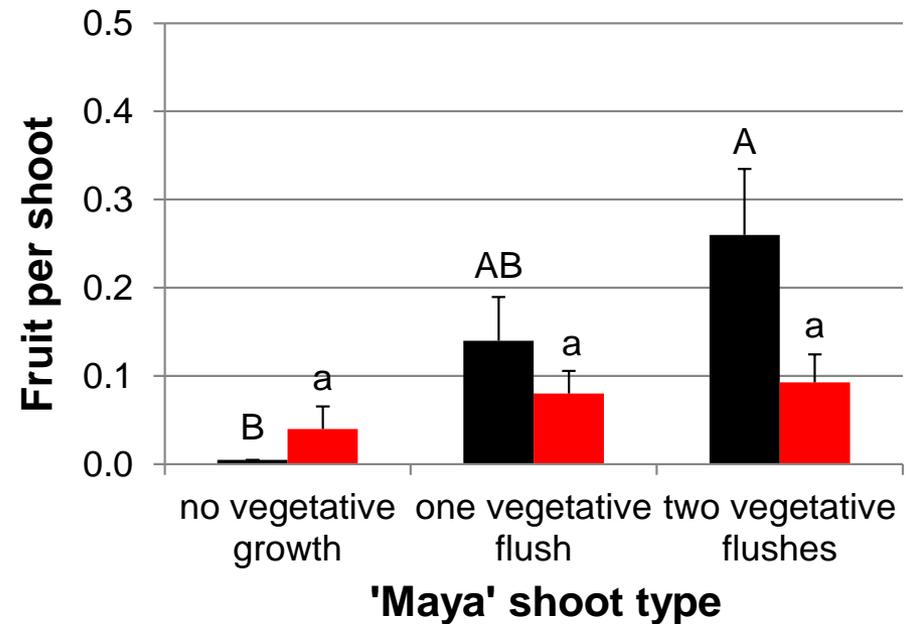
Two vegetative flushes

# Does Autumn Vegetative Shoot Growth Influence Fruit Load?

Omer



Maya



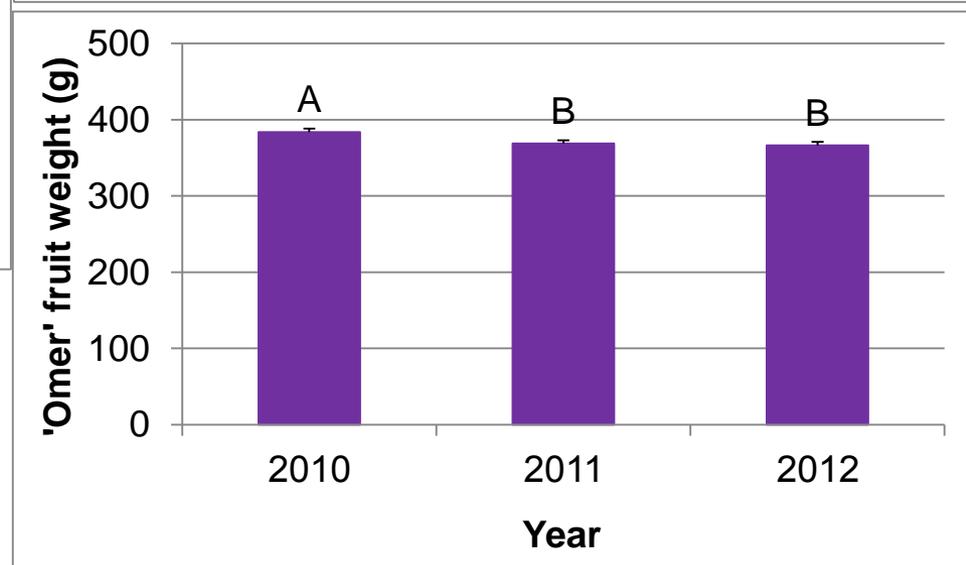
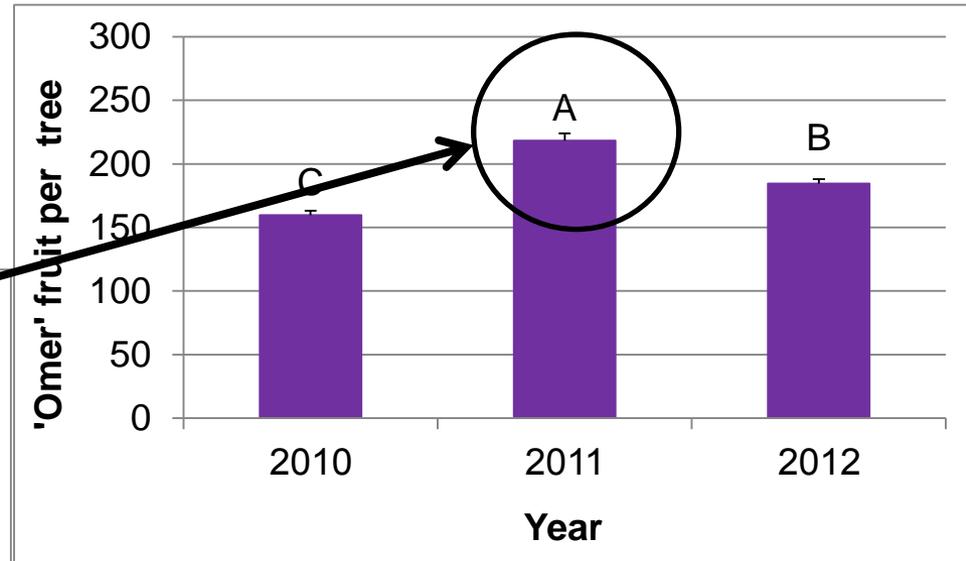
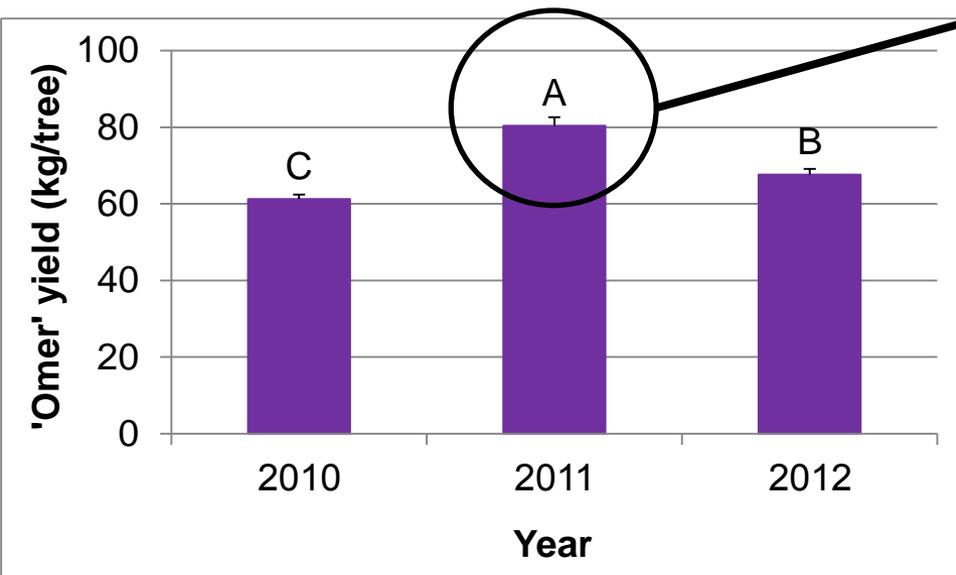
Fruit load is positively related to the previous autumn's vegetative growth intensity



Do Differences in Weather Conditions  
Affect Productivity?

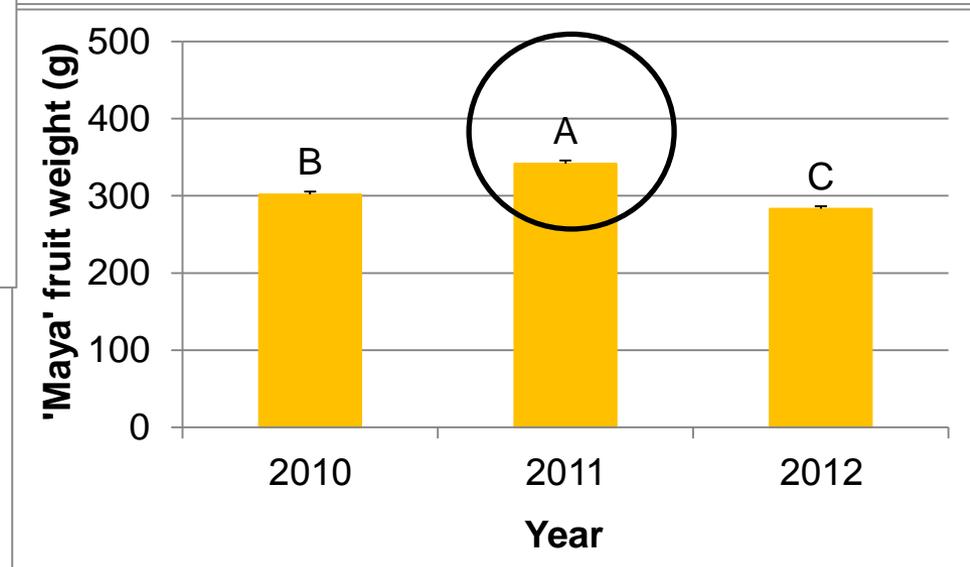
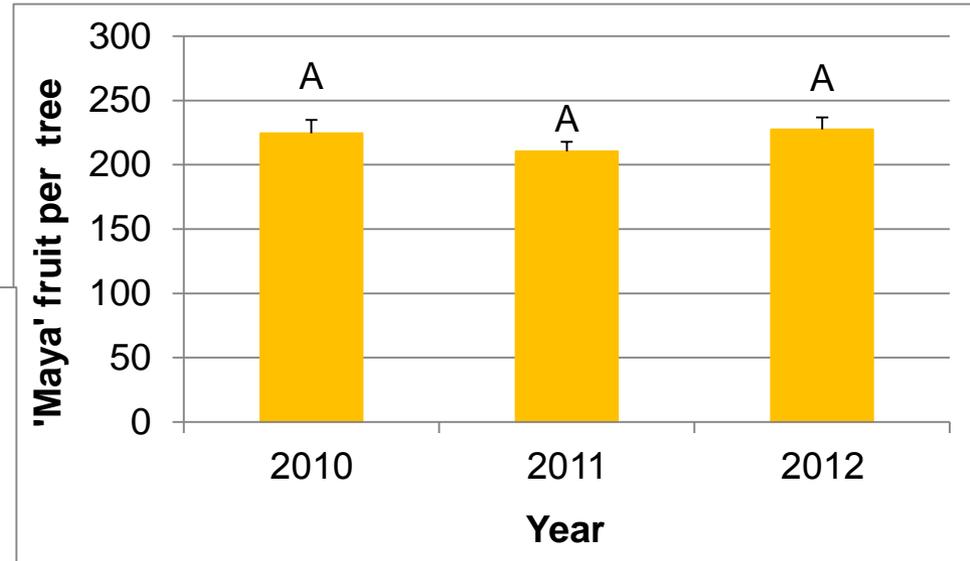
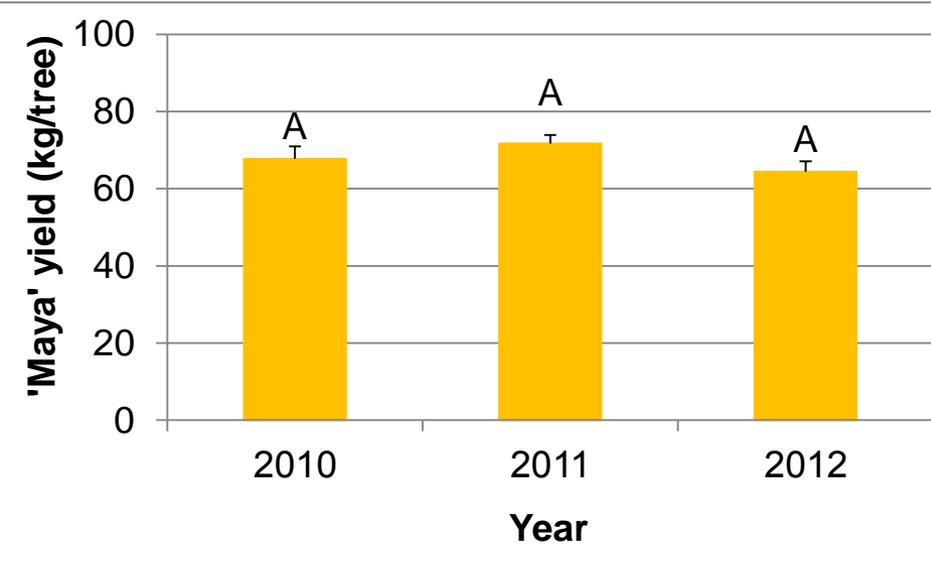


# 'Omer' Production

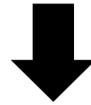




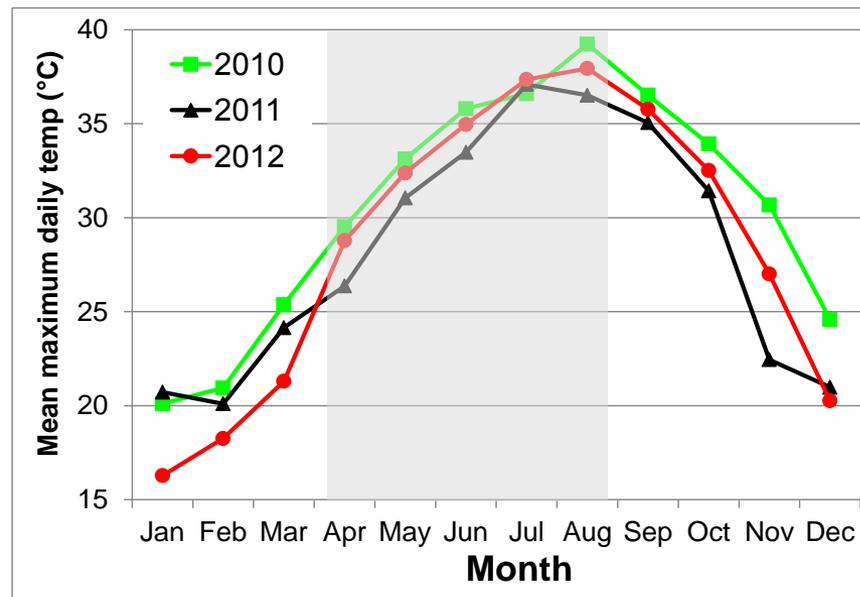
# 'Maya' Production



# Do Differences in Weather Conditions Affect Productivity?



Moderate temperatures during fruit development contributed to 'Omer' yield and number of fruit per tree and to 'Maya' fruit size



# Factors Affecting 'Omer' and 'Maya' Production in Israeli Orchards

## Summary:

1. No clear positive correlation between bloom date and inflorescence production was found
2. Early inflorescence removal did not elevate productivity
3. Fruit load is positively related to the previous autumn's vegetative growth intensity
4. The moderate temperatures during fruit development contributed to production

Thank you

