

# Comparison of Citrus Health Management Areas (CHMAs) Economic Performance

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Avon Park, FL

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# Presentation Outline

- 1) Economics Choice Game related to CHMAs
- 2) Comparison of CHMAs Economic Performance

# Economics Choice Game

Objective: Better understand growers' choices regarding CHMA participation

- What drives participation?
- How growers analyze the costs versus benefits?
- Is coordination with neighbors an issue?

For the game:

- 1) There is no right or wrong answer
- 2) Non-growers are encouraged to participate as well  
(but please indicate not grower in first page)

**Decide between A or B for each of the 10 scenarios below**

Scenario	A Payout in excess of expenses equal to:	B Payout in excess of expenses with:	Check box A or B with your decision:	
1	\$150 per acre for sure	33% chance of getting \$0 67% chance of getting \$1,500 per acre	A <input type="checkbox"/>	B <input type="checkbox"/>
2	\$300 per acre for sure	33% chance of getting \$0 67% chance of getting \$1,500 per acre	A <input type="checkbox"/>	B <input type="checkbox"/>
3	\$450 per acre for sure	33% chance of getting \$0 67% chance of getting \$1,500 per acre	A <input type="checkbox"/>	B <input type="checkbox"/>

# Raffle Based on Game Choices Made for Game 1

## One of you can win up to \$150 dollars cash

1. We will draw a random number from 1 to 300 (# participants)
2. The person with that number on the upper right corner of the first page will draw another number from 1 to 10
3. That number will determine which scenario from the first game they will play
4. If the participant chose alternative A, the participant will win 10% of that amount for sure
5. If the participant chose alternative B, the participant will have a 67% chance of winning 10% of \$1,500
6. UF personnel is excluded

**Decide between A or B for each of the 10 scenarios below**

Please fill out the form even if you are not currently participating CHMAs programs

**Assume there are 15 growers in your CHMA**

Scenario	A Payout in excess of expenses equal to:	B Payout in excess of expenses equal to:	Check box A or B with your decision:	
11	\$150 per acre for sure	\$0 if less than 5 growers in your CHMA choose option B \$1,500 per acre if at least 5 growers in your CHMA choose option B	A <input type="checkbox"/>	B <input type="checkbox"/>
12	\$300 per acre for sure	\$0 if less than 5 growers in your CHMA choose option B \$1,500 per acre if at least 5 growers in your CHMA choose option B	A <input type="checkbox"/>	B <input type="checkbox"/>
13	\$450 per acre for sure	\$0 if less than 5 growers in your CHMA choose option B \$1,500 per acre if at least 5 growers in your CHMA choose option B	A <input type="checkbox"/>	B <input type="checkbox"/>

**Decide between A or B for each of the 10 scenarios below**

Please fill out the form even if you are not currently participating CHMAs programs

**Assume there are 15 growers in your CHMA**

Scenario	A Payout in excess of expenses equal to:	B Payout in excess of expenses equal to:	Check box A or B with your decision:			
21	\$150 per acre for sure	\$0 if less than 10 growers in your CHMA choose option B \$1,500 per acre if at least 10 growers in your CHMA choose option B	A	<input type="checkbox"/>	B	<input type="checkbox"/>
22	\$300 per acre for sure	\$0 if less than 10 growers in your CHMA choose option B \$1,500 per acre if at least 10 growers in your CHMA choose option B	A	<input type="checkbox"/>	B	<input type="checkbox"/>
23	\$450 per acre for sure	\$0 if less than 10 growers in your CHMA choose option B \$1,500 per acre if at least 10 growers in your CHMA choose option B	A	<input type="checkbox"/>	B	<input type="checkbox"/>

# What is the Economic Benefit of CHMAs?: A Case Study

Citrus Health Management Areas (CHMAs) Categories

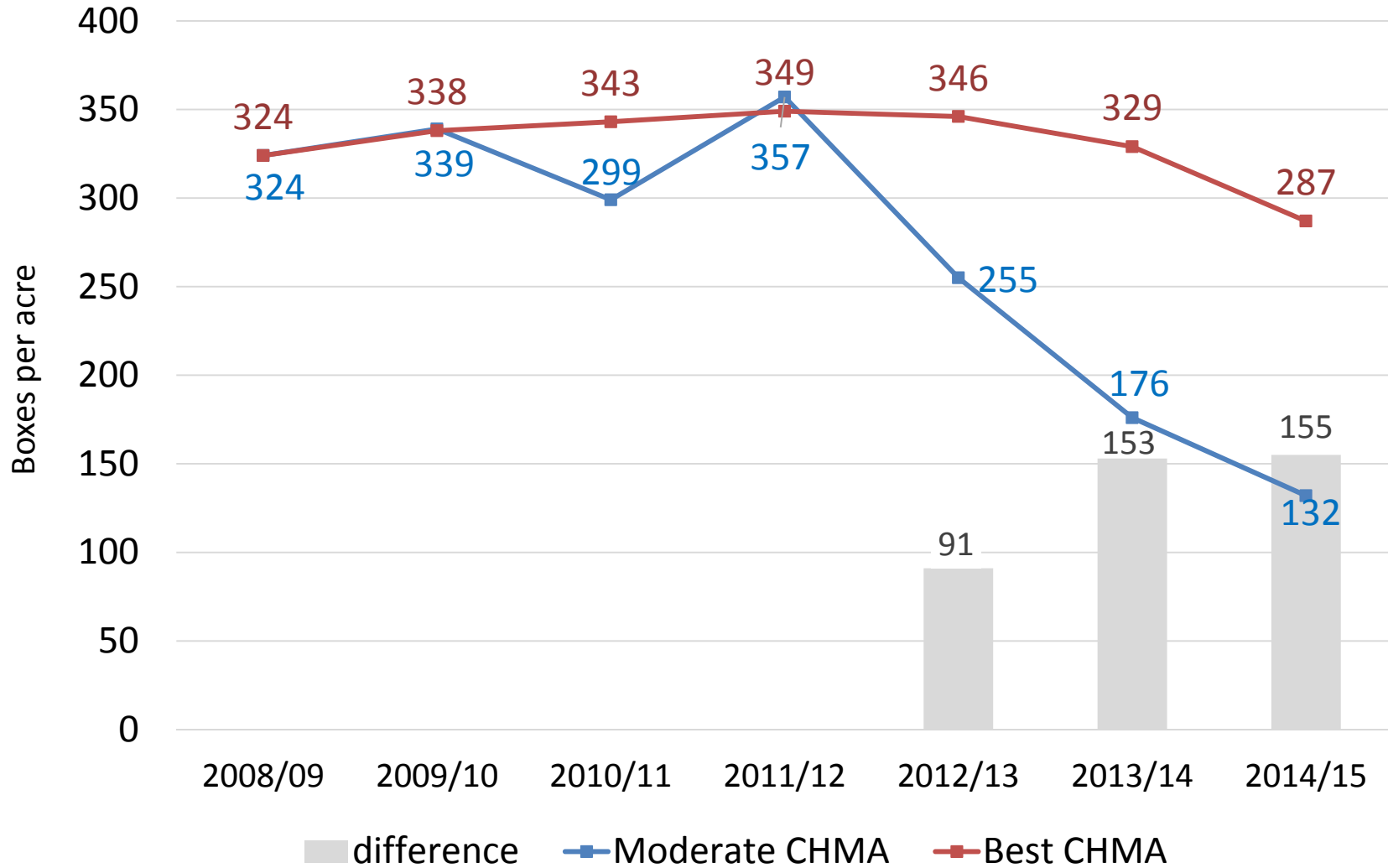
	<b>Best</b>	<b>Good</b>	<b>Moderate</b>	<b>Poor</b>
ACP average counts	0 to 2	3 to 5	6 to 9	10+
Leadership	Strong	Strong	Sporadic	None
Participation	Majority of growers	Most growers	Some growers	Very few growers
Communication	Constant	Once per month	Quarterly	None
Number of sprays/year	5+	5	4	2

Data

- Provided by grower that owns *Valencia* blocks in 2 different CHMAs
  - 5 blocks totaling 161 acres located in a “best” class CHMA
  - 6 blocks comprising 221 acres located in a “moderate” class CHMA

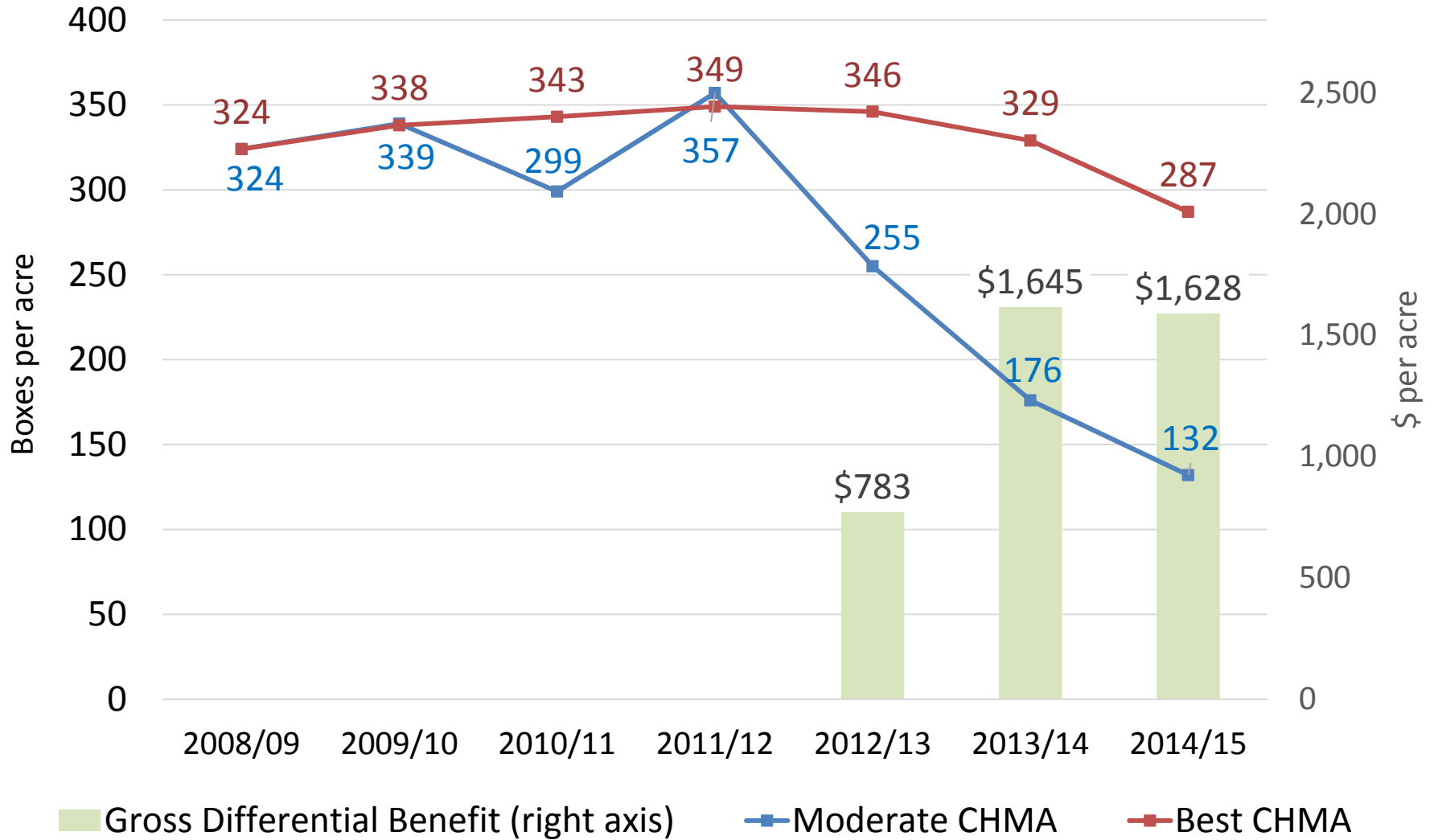


# Regression Analysis Results: Valencia Yield per Acre by CHMA Class



# Regression Analysis Results

## Valencia Yield and Benefit per Acre by CHMA Class



**Decide between A or B for each of the 10 scenarios below**

Please fill out the form even if you are not currently participating CHMAs programs

**Assume there are 15 growers in your CHMA**

Scenario	A Payout in excess of expenses equal to:	B Payout in excess of expenses equal to:	Check box A or B with your decision:
31	\$150 per acre for sure	\$0 if less than 5 growers in your CHMA choose option B \$1,500 per acre if at least 5 growers in your CHMA choose option B	A <input type="checkbox"/> B <input type="checkbox"/>
32	\$300 per acre for sure	\$0 if less than 5 growers in your CHMA choose option B \$1,500 per acre if at least 5 growers in your CHMA choose option B	A <input type="checkbox"/> B <input type="checkbox"/>
33	\$450 per acre for sure	\$0 if less than 5 growers in your CHMA choose option B \$1,500 per acre if at least 5 growers in your CHMA choose option B	A <input type="checkbox"/> B <input type="checkbox"/>

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Thank you for attention

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<http://www.crec.ifas.ufl.edu/extension/economics/>