



Instituut voor Landbouw- en Visserijonderzoek

# Farmers' expectations and experiences with alternatives for surgical castration

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Agricultural and Fisheries Policy Area

# Evaluation of farmers' expectations and experiences

## 2009 Expectations

19 farmers  
perform 4  
alternatives

Same evaluation of alternatives  
in 2009 and 2011:

- Questionnaire with issue statements
- Ranking of the 5 treatments (control + 4 alternatives)

## 2011 Experience

# Evaluated alternatives



## Control

- Routine castration practice



## Castration with CO<sub>2</sub>-anaesthesia

- Clinical trial, in cooperation with ZTC (Lovenjoel, Belgium)



## Castration with analgesia

- Metacam® 10 to 15 minutes before castration



## Entire male pigs

- Slaughtered at normal slaughter weight



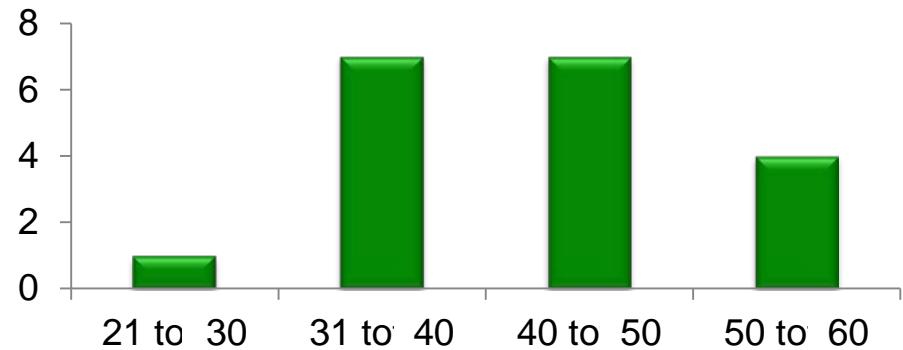
## Immunocastration

- Two vaccinations with Improvac®

# Experimental set-up



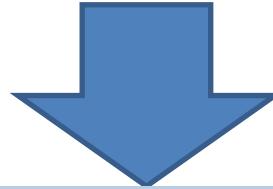
Age farmers (year)



- 19 farmers
- 120 male pigs/treatment
- Single sex rearing
- All 5 treatments in random order

# Results

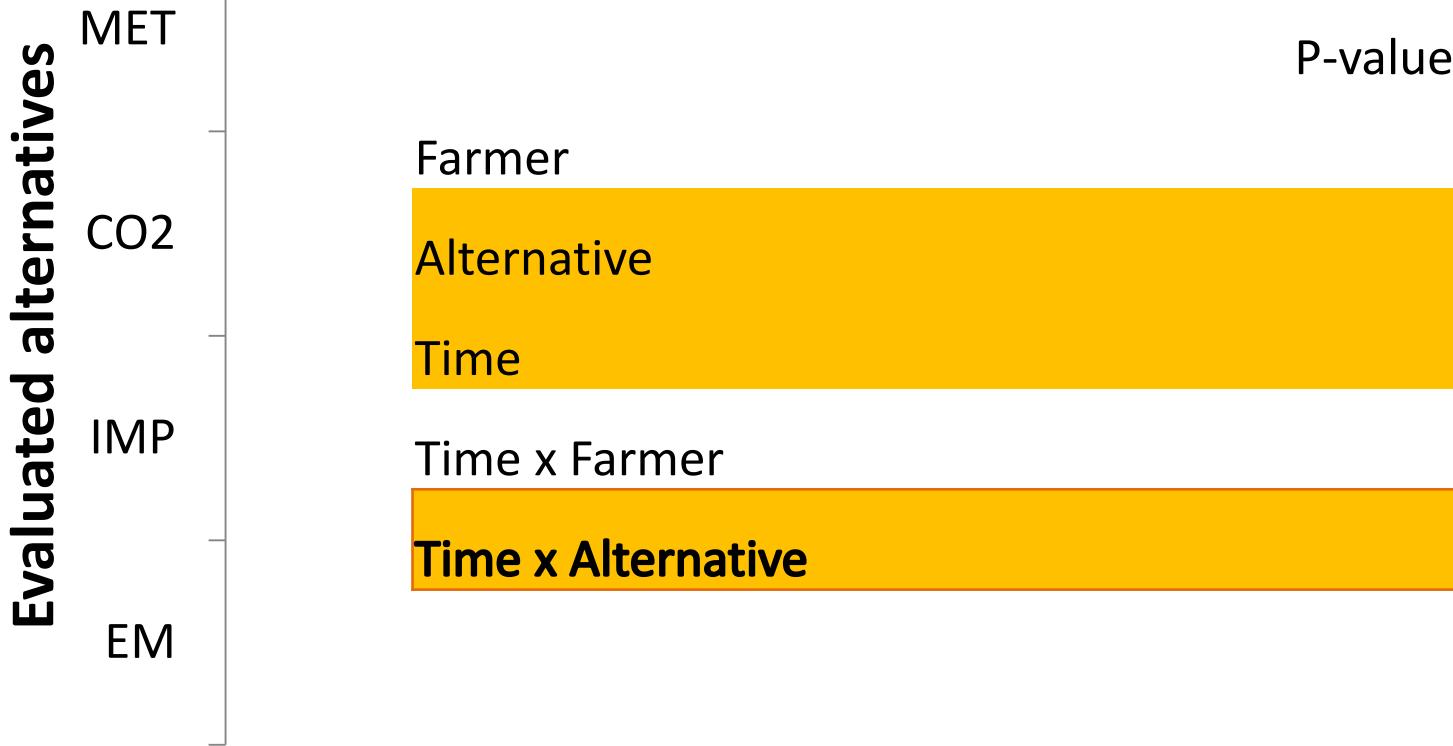
- 19 farmers
- 4 alternatives + control
- 2 time points (“before” and “after”)
- Issue statements and ranking of preference



- Time x alternative  
change of opinion due to experience (and time)
  - Farmer  
different farmer, different preference
- 
- Limitations for generalization

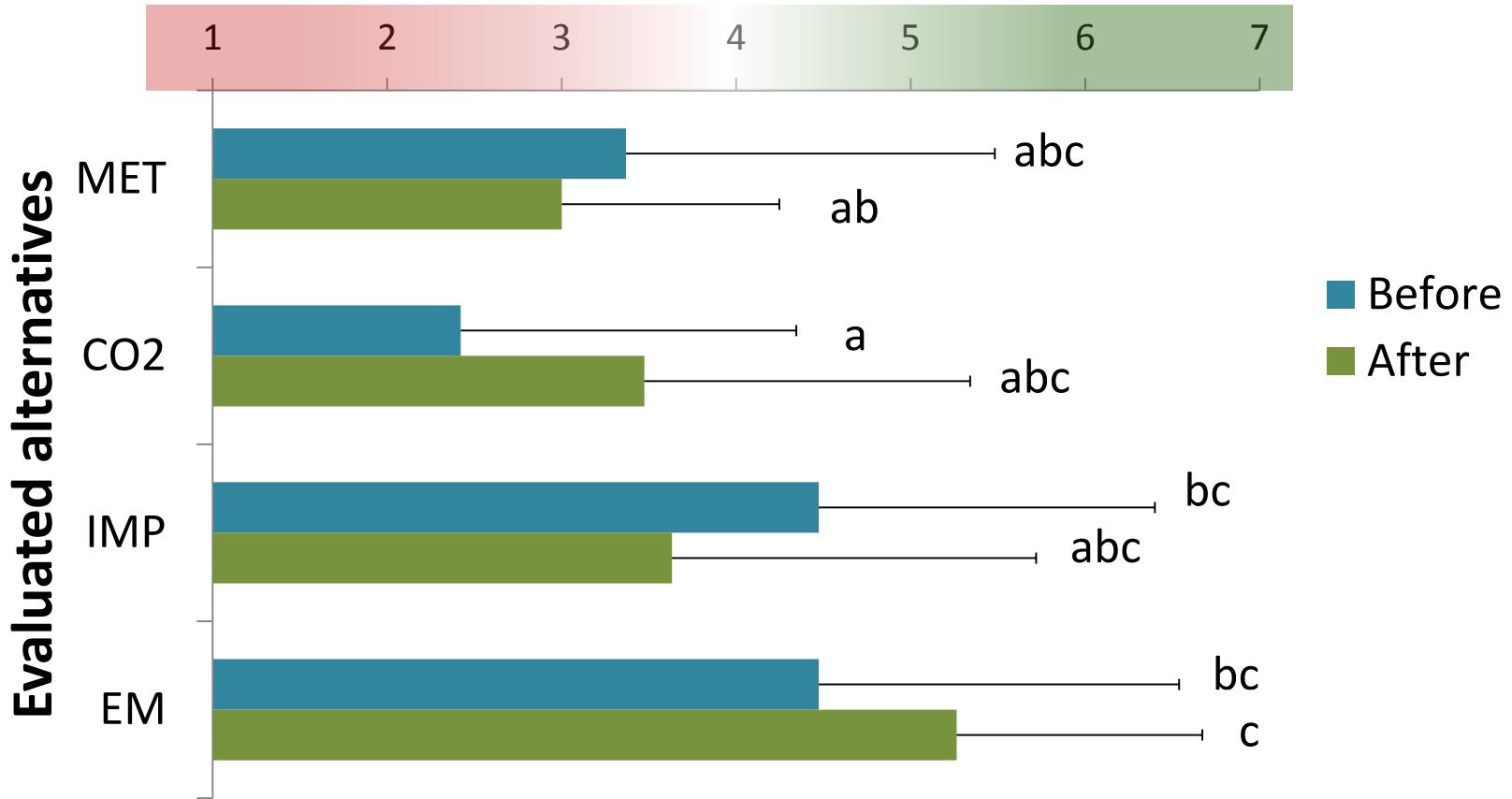
## Issue statement

Totally disagree (1) to totally agree (7)



## Easy to perform

Totally disagree (1) to totally agree (7)

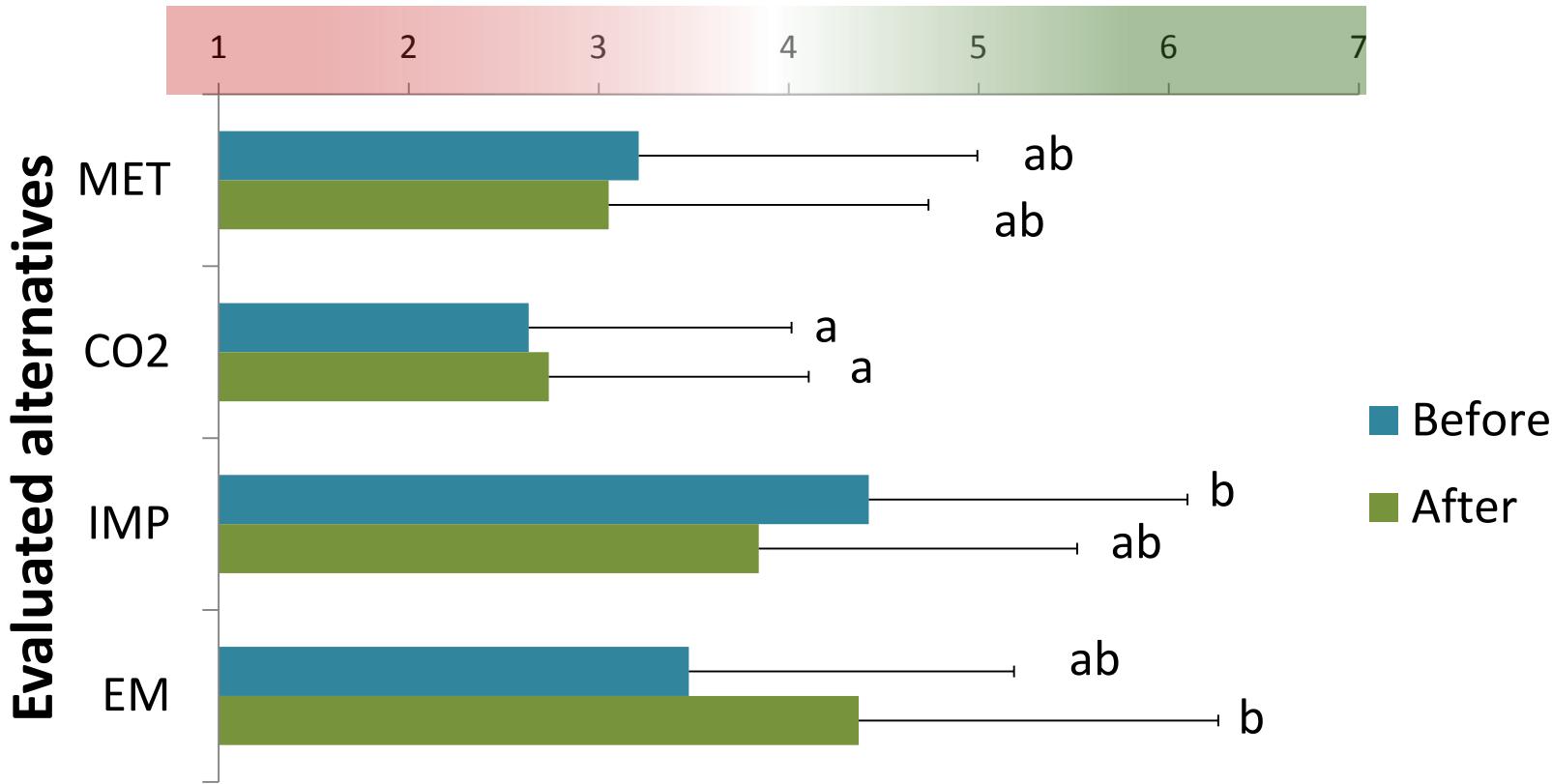


Before: CO<sub>2</sub> < IMP, EM  
After: MET < EM

	P-value
Alternative	0.001
Time	0.564
Time x Alternative	0.049

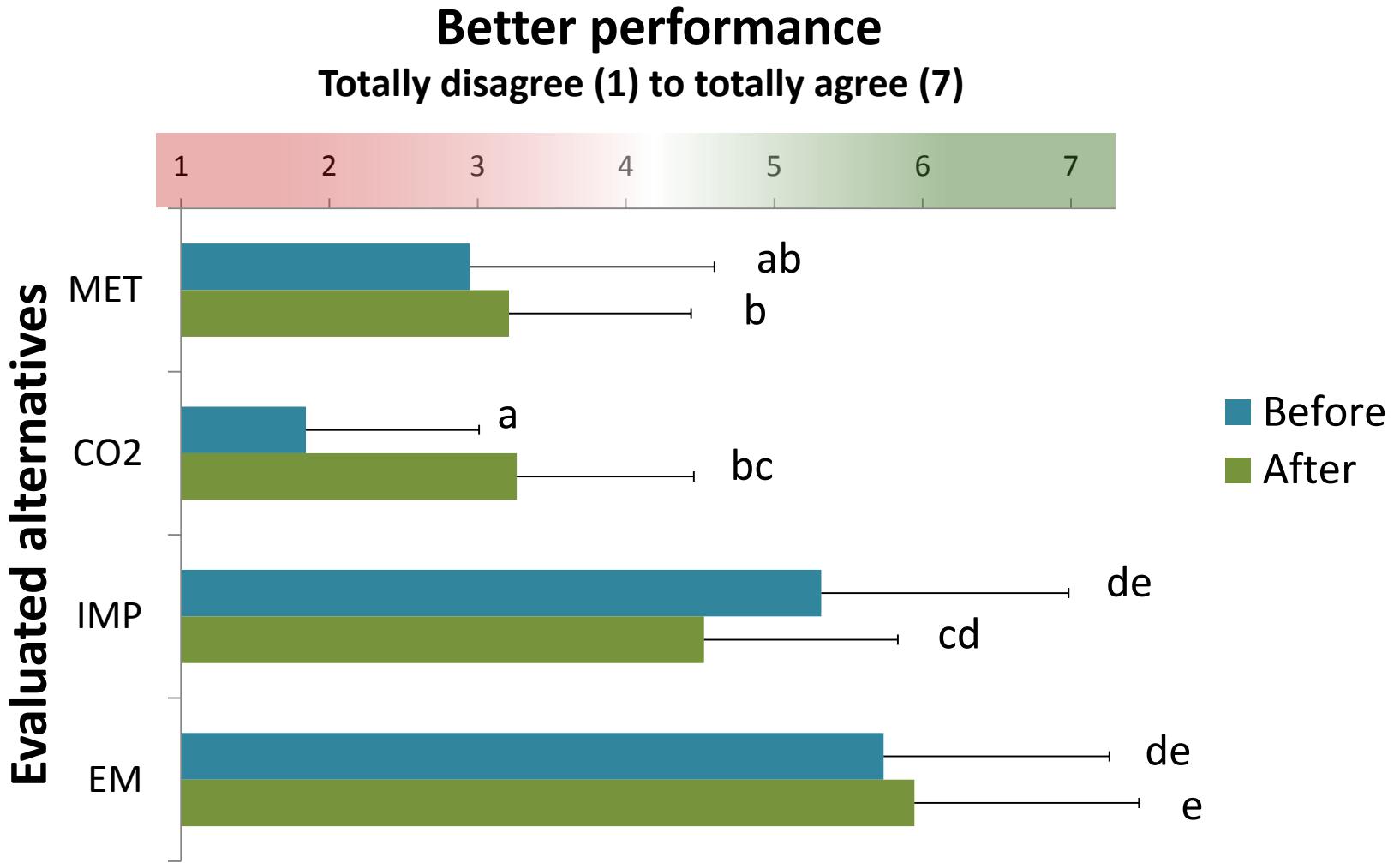
# Worthwhile performing

Totally disagree (1) to totally agree (7)



Before: CO<sub>2</sub> < IMP  
After: CO<sub>2</sub> < EM

	P-value
Alternative	0.001
Time	0.711
Time x Alternative	0.035

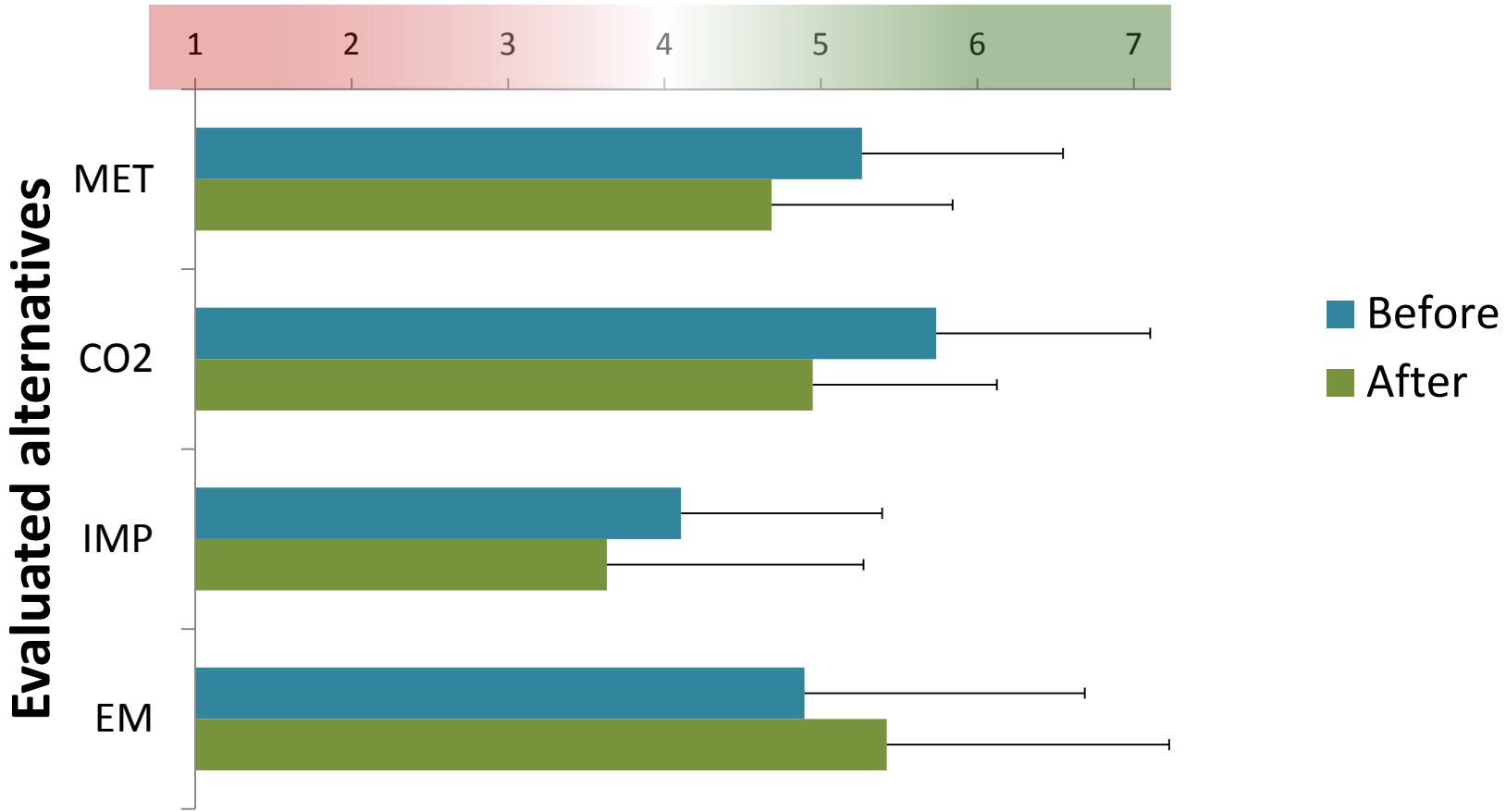


Before: CO<sub>2</sub>, MET < IMP, EM  
After: MET ≤ CO<sub>2</sub> ≤ IMP < EM

	P-value
Alternative	<0.001
Time	0.114
Time x Alternative	0.002

# Better consumer acceptance

Totally disagree (1) to totally agree (7)

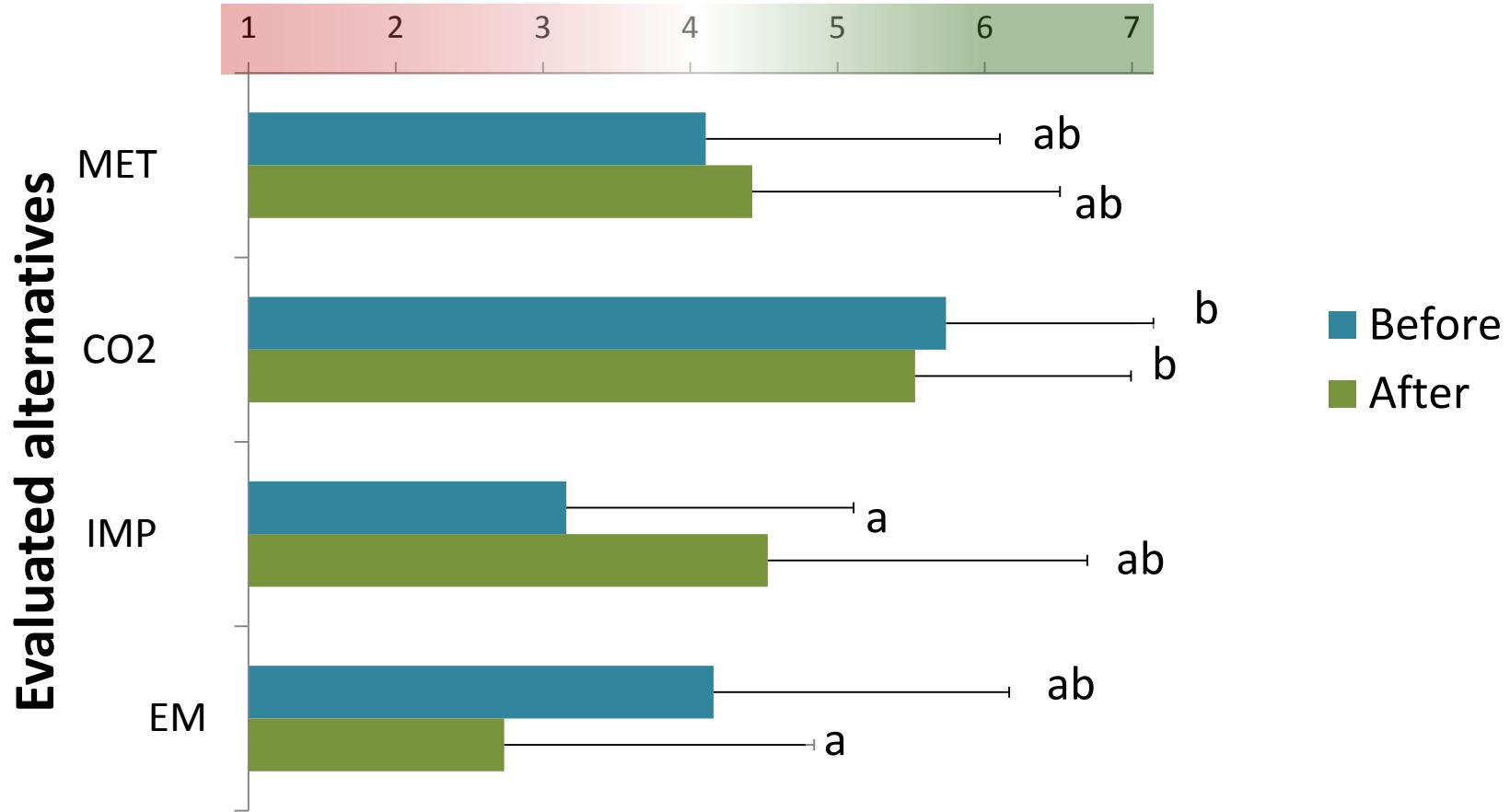


IMP < MET, EM, CO2

	P-value
Alternative	<0.001
Time	0.068
Time x Alternative	0.052

# I don't want to perform

Totally disagree (1) to totally agree (7)

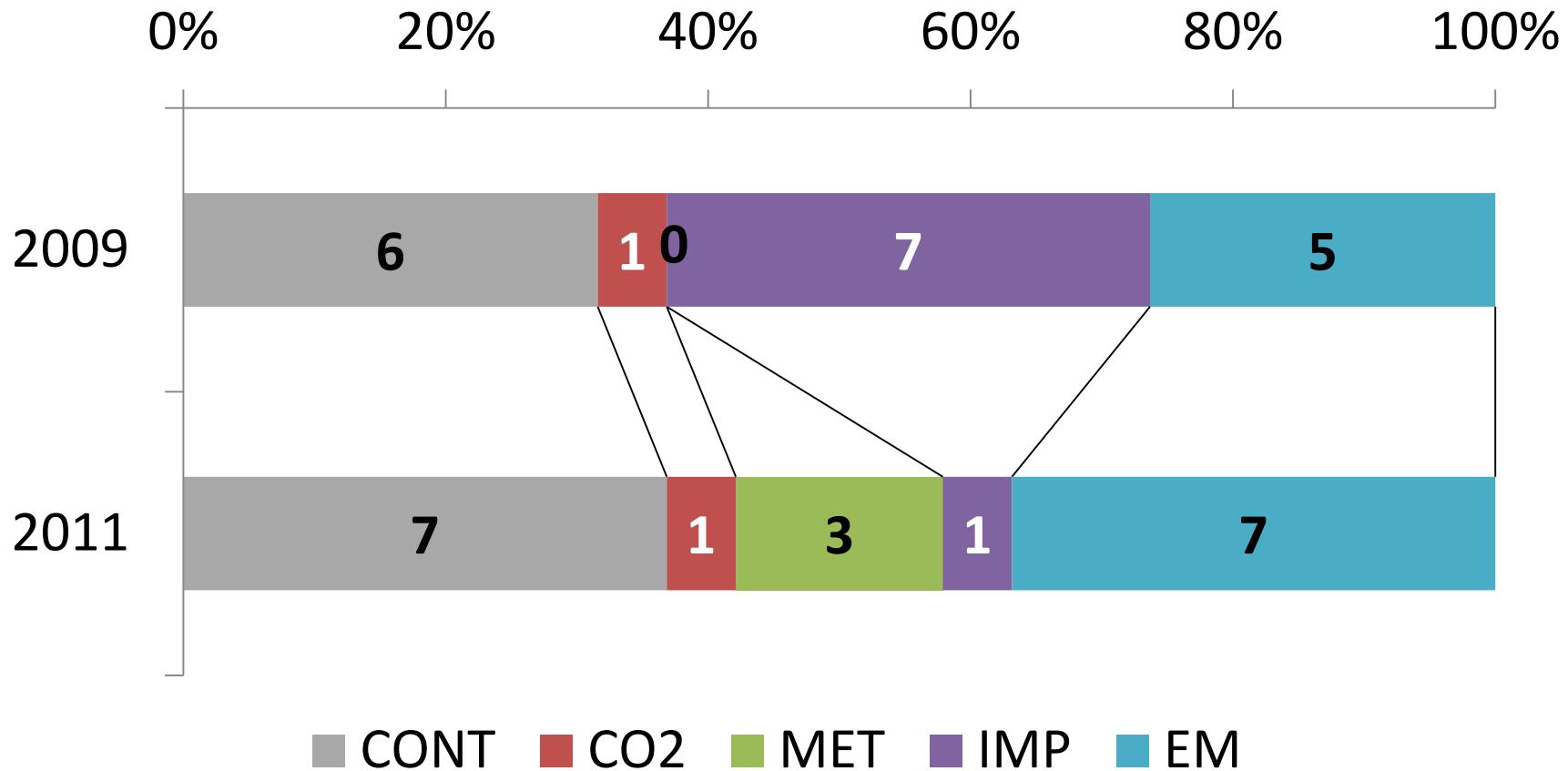


Before: IMP ≤ MET, EM ≤ CO<sub>2</sub>  
After: EM ≤ MET, IMP ≤ CO<sub>2</sub>

	P-value
Alternative	0.001
Time	0.954
Time x Alternative	0.001

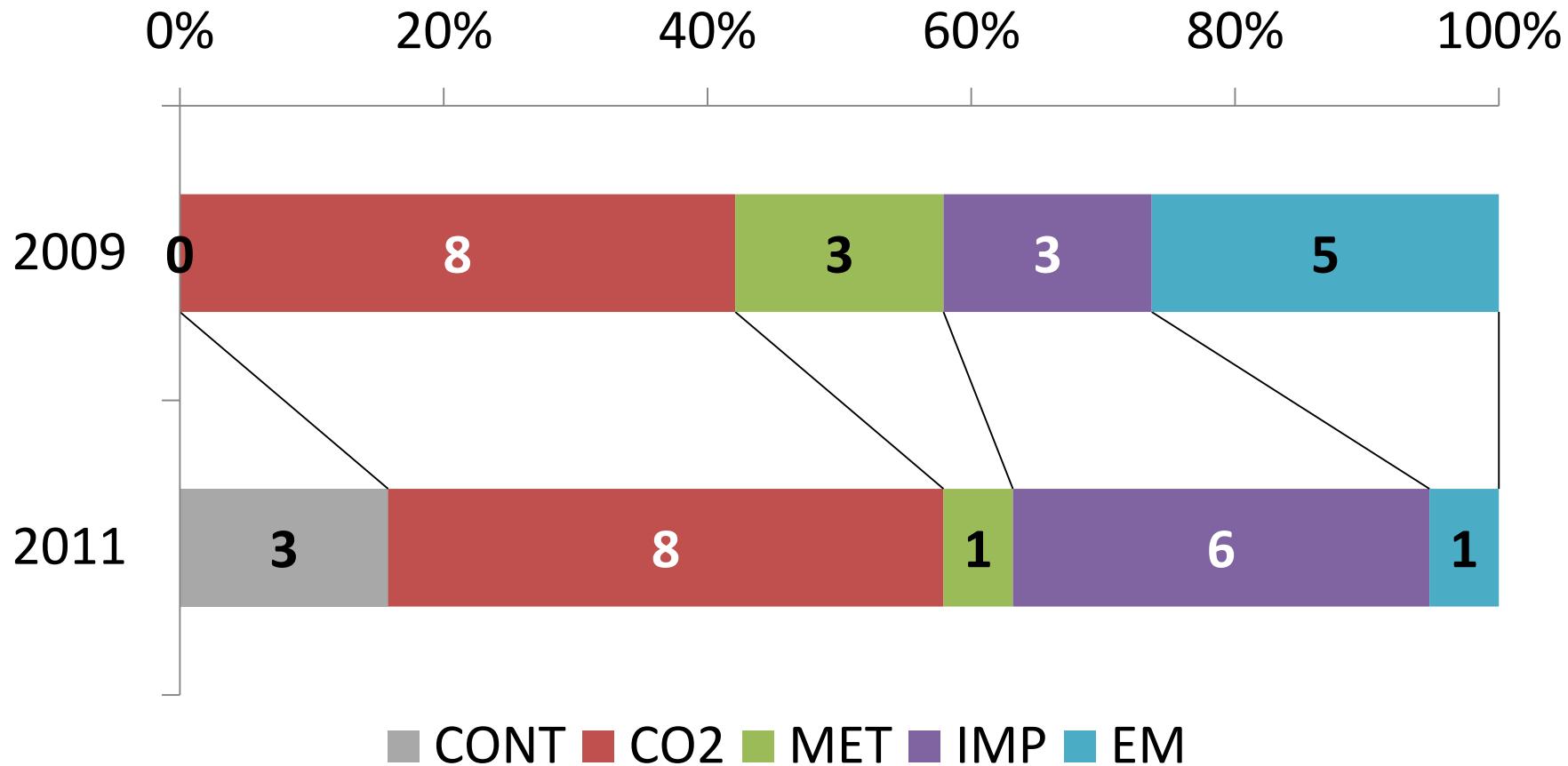
# Different farmer, different preference

## Most preferred method (ranking 1)



# Different farmer, different preference

## Least preferred method (ranking 5)



# Conclusions

Time x alternative

**EM and CO<sub>2</sub> scored better than expected,  
MET as expected,  
while IMP did not entirely match expectations**

Farmer

**different farmer, different preference**

# Thank you for your attention

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