

## Session 40:

### Pig Production Free Communications

# Effect of terminal sire genotype, slaughter weight, and gender on growth performance and carcass traits in European-Chinese pigs.

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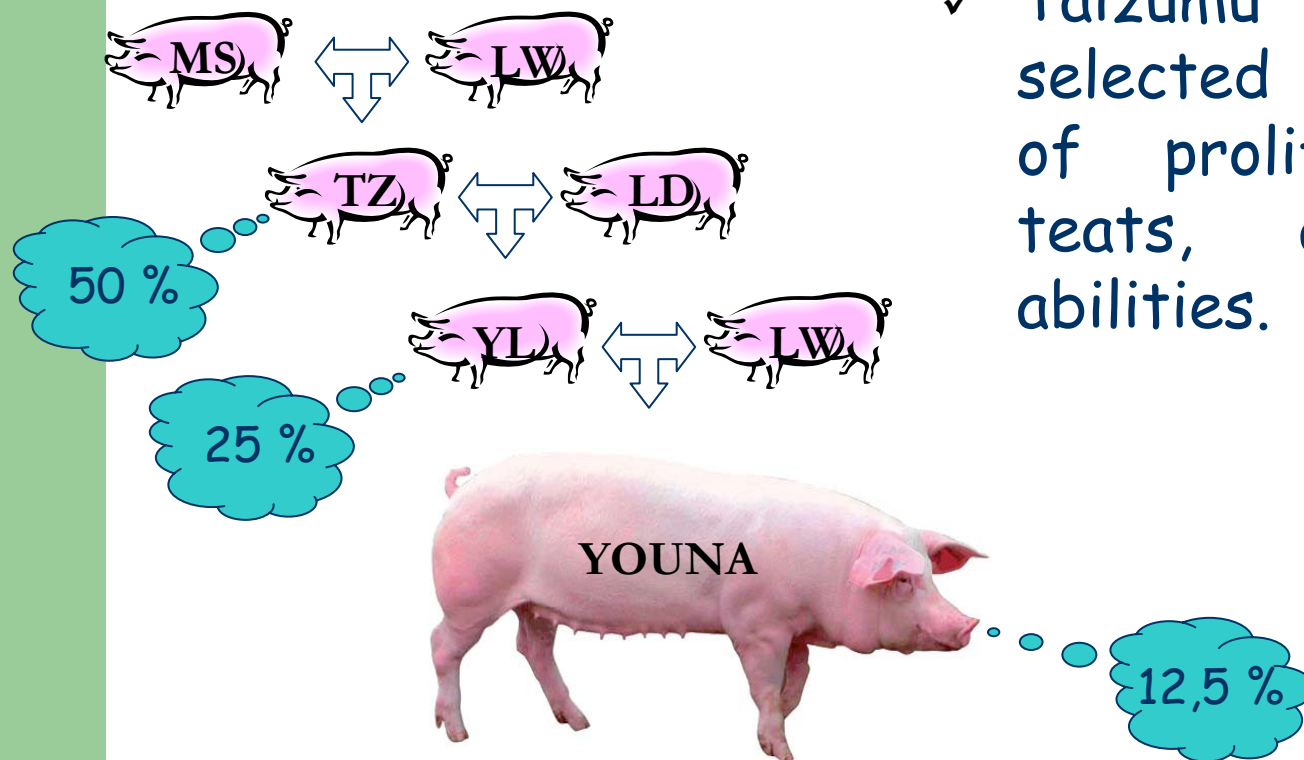
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# INTRODUCTION

- ✓ Youna sows (Gene+) comes from the Tai Zumu composite line.



- ✓ Taizumu sows has been selected on the criteria of prolificacy, no. of teats, and mothering abilities.

# INTRODUCTION

- ✓ Crosses involving Meishan (Young 1995, 1998):
  - ✓ Increased reproduction.
  - ✓ Decreased growth rate, and carcass traits of piglets.
  - ✓ Increased fatness of carcasses.
- ✓ However, intramuscular, and subcutaneous fat are very important for industry of dry-cured products.
- ✓ Terminal sire genotype is the main factor which affects performance parameters and carcass traits.
- ✓ Slaughter weight could affect meat quality.

## OBJECTIVE

- To evaluate the effects of terminal sire genotype, slaughter weight, and gender on performance and carcass traits in crossbreds with Youna.

# MATERIALS & METHODS

- ✓ There were 8 treatments in a factorial design:
  - ✓ Duroc *vs* Pietrain.
  - ✓ 105 *vs* 115 kg BW.
  - ✓ Castrated males *vs* entire females.
- ✓ A total of 256 pigs of  $30.9 \pm 4.9$  kg initial BW.
- ✓ Four replicates of eight pigs/pen per treatment.



# MATERIALS & METHODS

- ✓ All animals recieved the same feed offered *ad libitum*.
- ✓ Measures:
  - ✓ Growth, feed intake and feed conversion.
  - ✓ Carcass quality:
    - ✓ Carcass fatness at P2 and *Gluteus medius* muscle.
    - ✓ Dressing percentage.
    - ✓ Trimmed ham, shoulder and loin yield.



# MATERIALS & METHODS

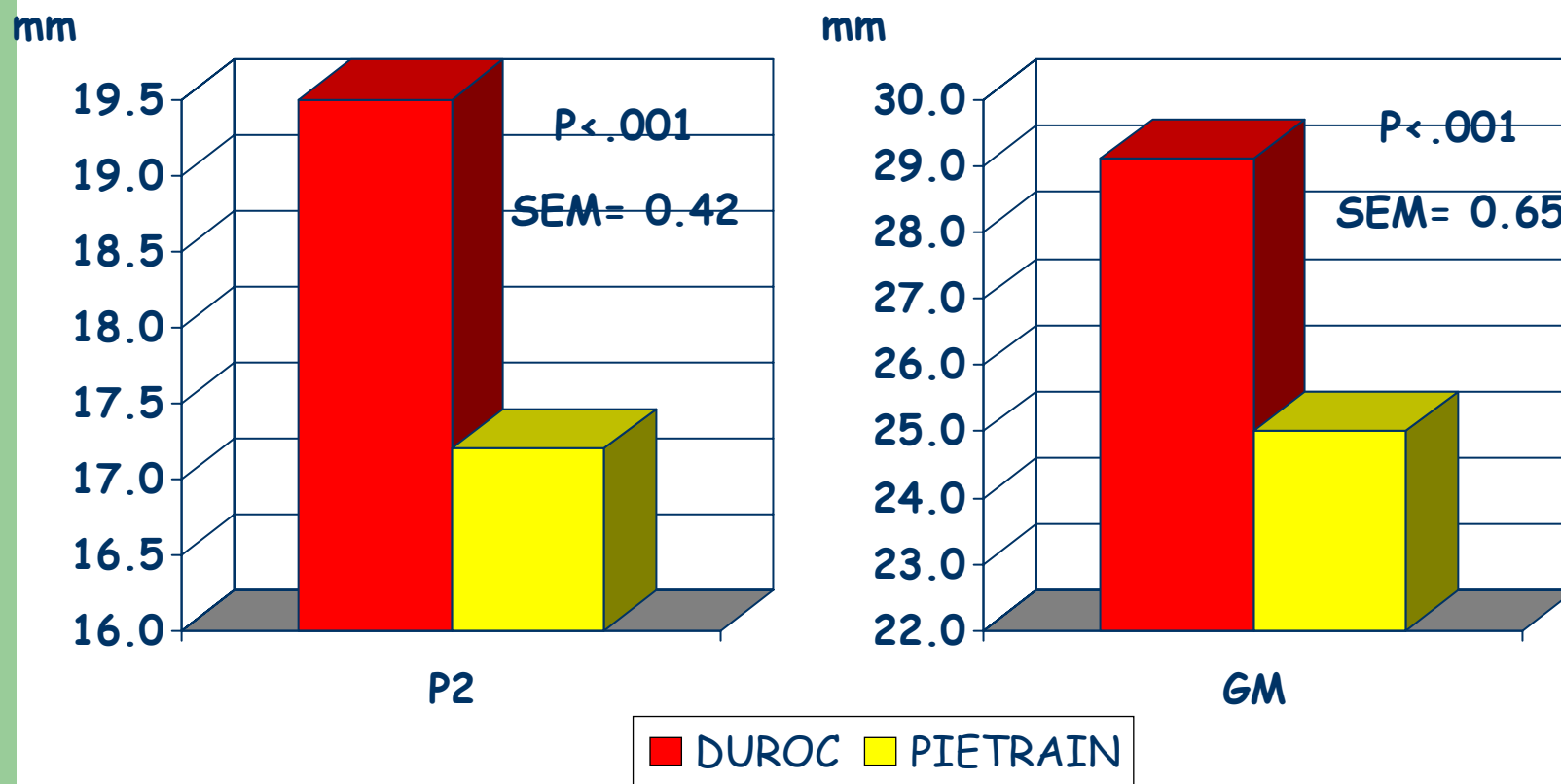
## Statistical analyses

- ✓ GLM procedure of SAS.
- ✓ Model:
  - ✓ terminal sire genotype,
  - ✓ slaughter weight,
  - ✓ gender,
  - ✓ and their interactions.
- ✓ Data are presented as least square means.

## RESULTS: Terminal sire genotype

- ❑ No differences in performance parameters

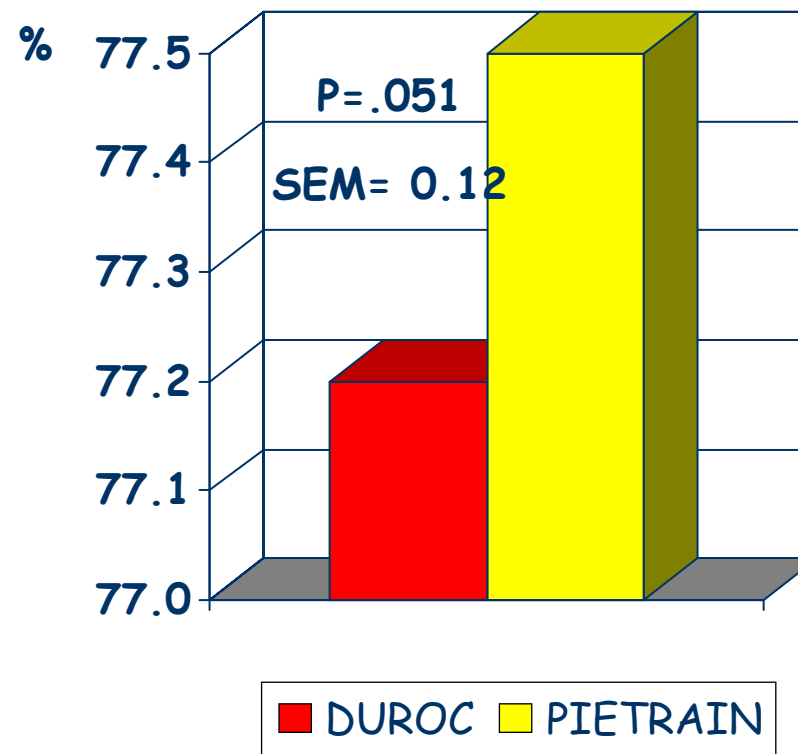
### Carcass fatness





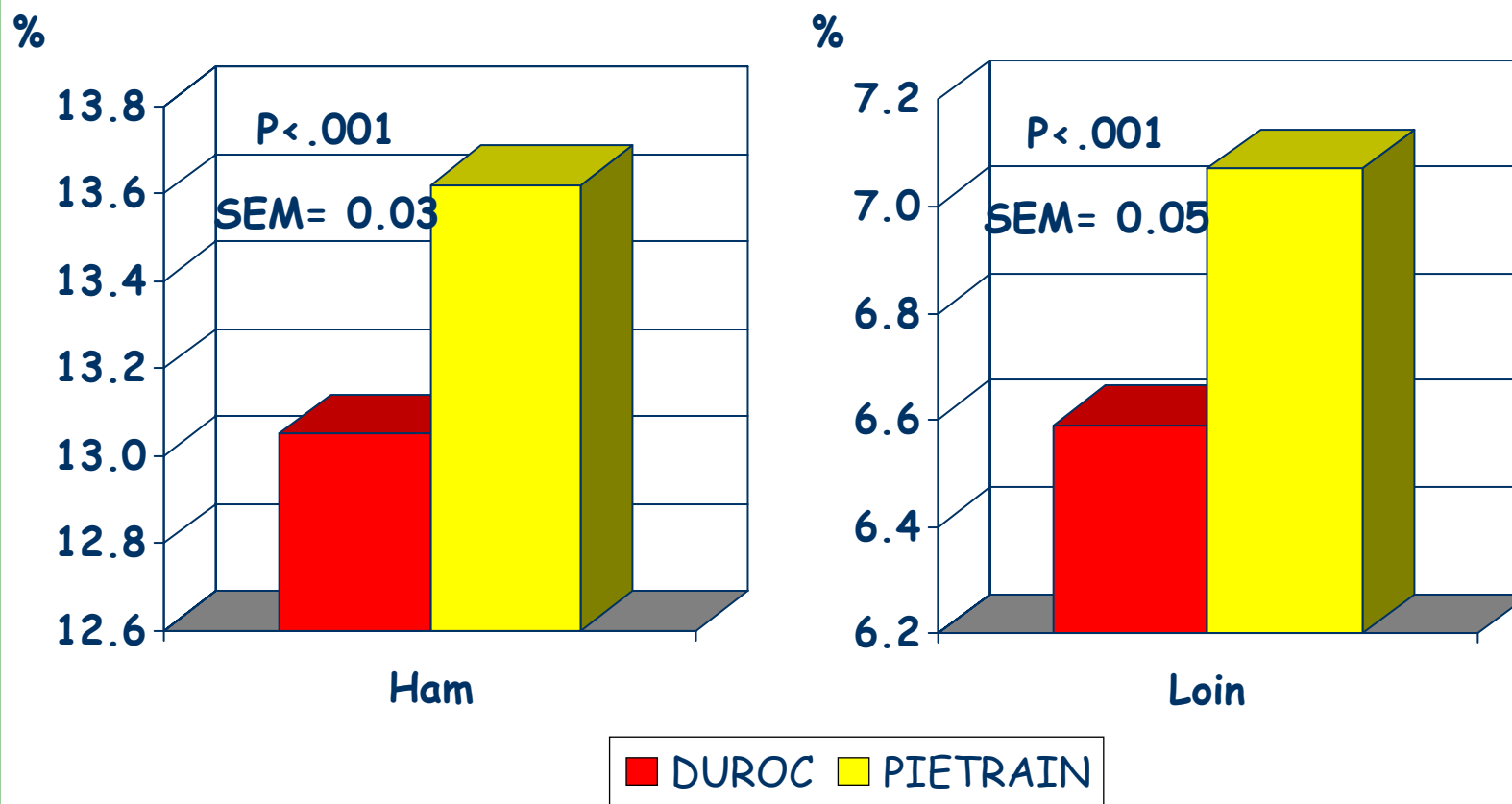
## RESULTS: Terminal sire genotype

### Carcass yield



## RESULTS: Terminal sire genotype

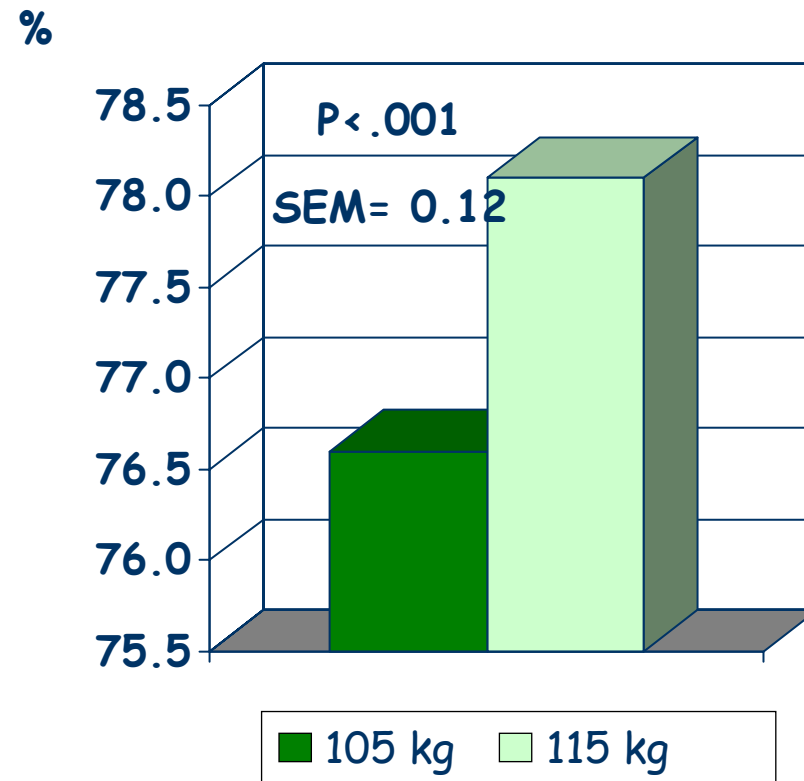
### Trimmed ham and loin yield



## RESULTS: Slaughter weight

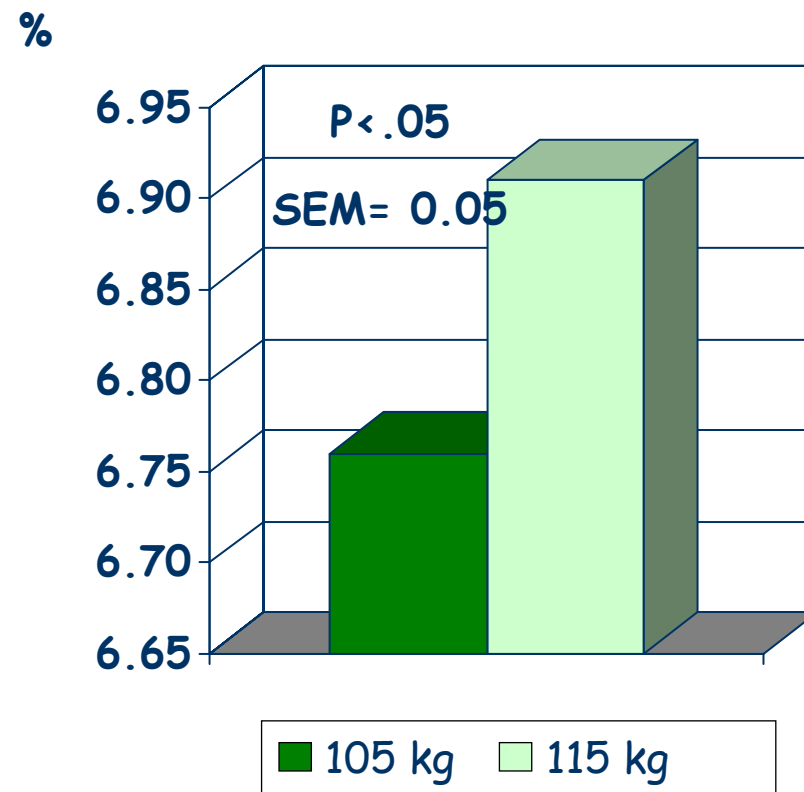
- No differences in performance parameters and carcass fatness

### Carcass yield



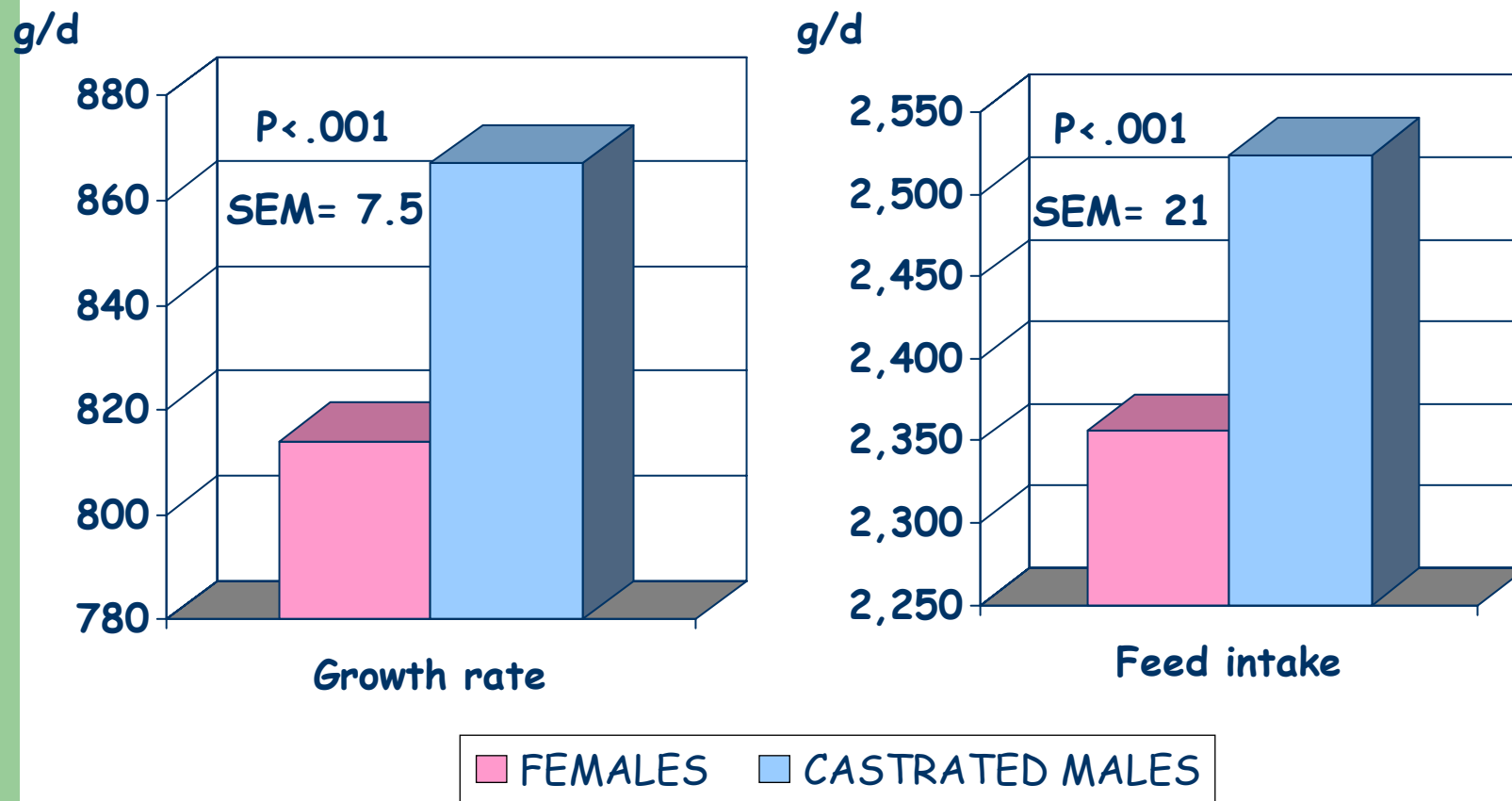
# RESULTS: Slaughter weight

## Loin yield



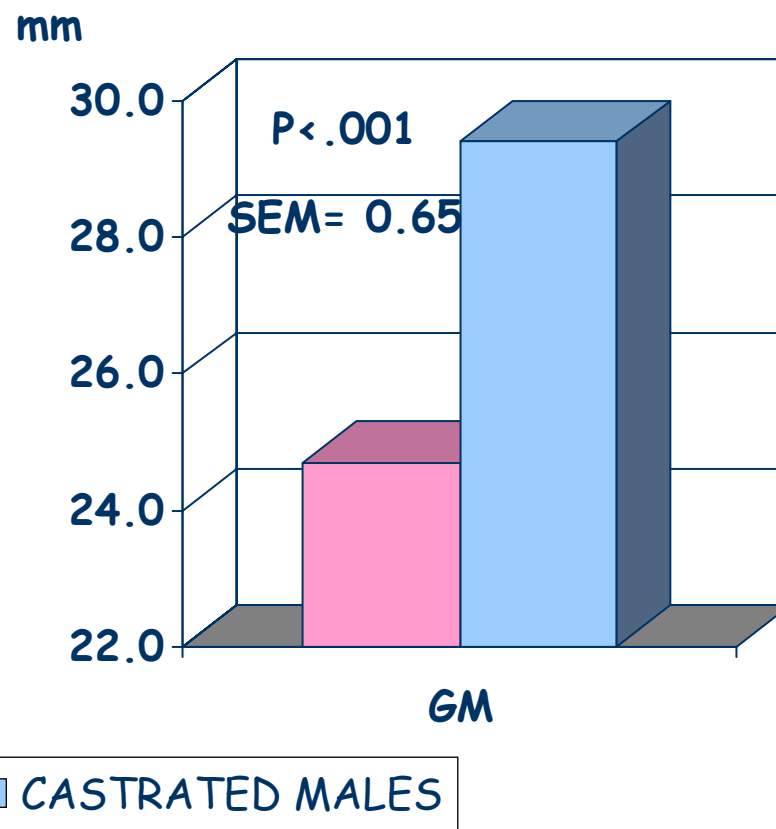
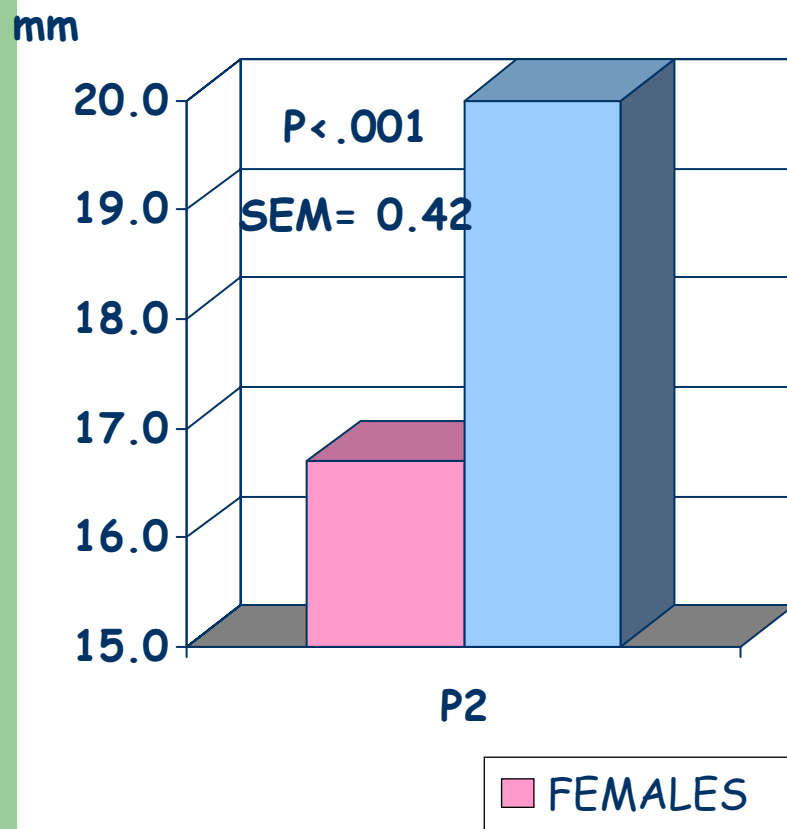
# RESULTS: Gender

## Performance parameters



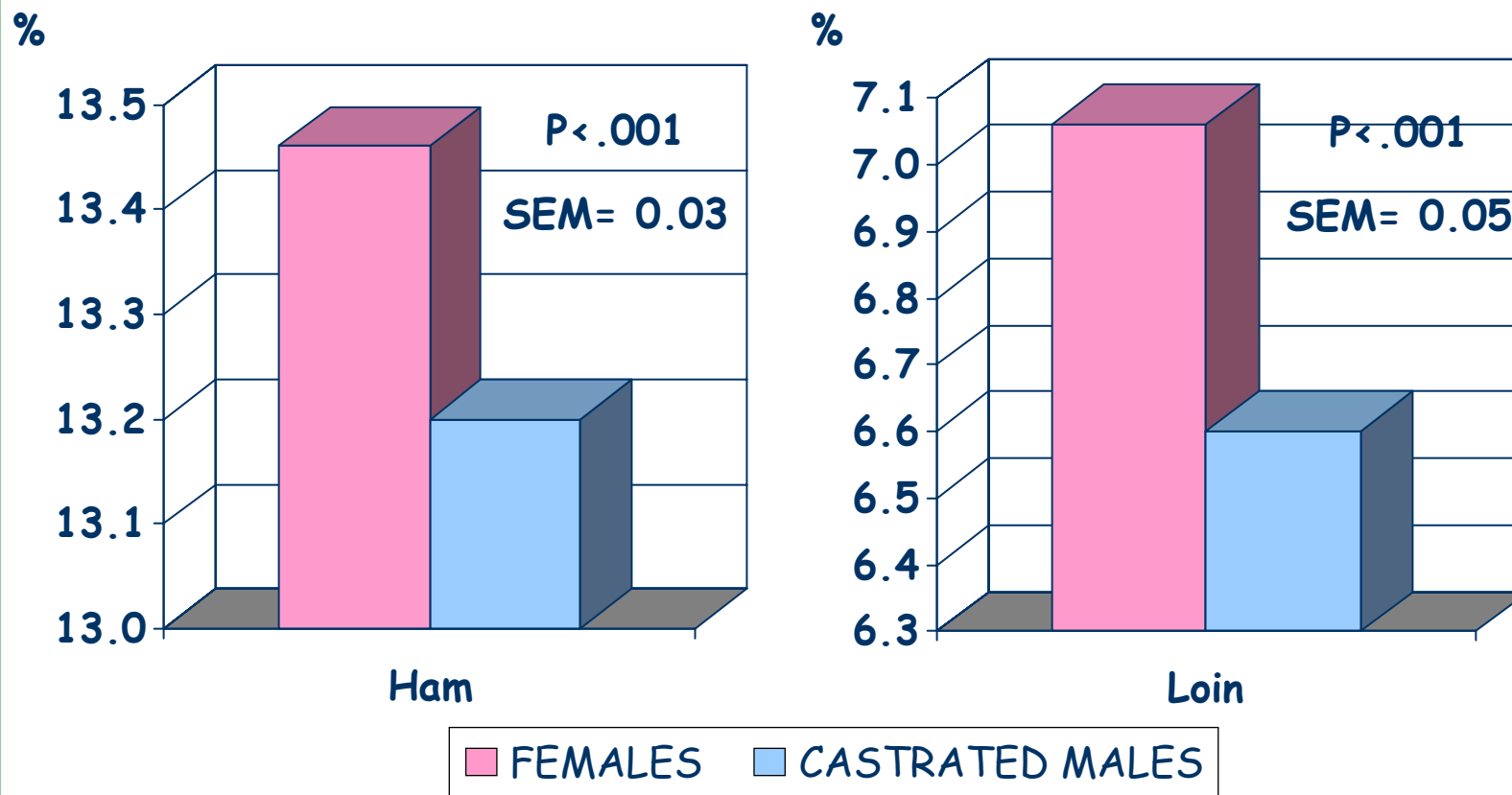
# RESULTS: Gender

## Carcass fatness



## RESULTS: Gender

### Trimmed ham and loin yield



## CONCLUSIONS

- Crossbred with Duroc boars:
  - increased carcass fatness.
  - decreased carcass, ham, and loin yield.
- In consequence, the use of Duroc genotype as terminal sire improves fat deposition of pigs destined for the dry-cured industry, but decreases the yield of meat cuts.



## CONCLUSIONS

- A slaughter weight of 115 kg BW:
  - increased carcass and loin yield.
- Therefore, it is interesting to increase the SW from 105 to 115 kg BW in Duroc x Youna pigs.



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