



The effect of sex on performance and carcass quality in commercial pig farms

A. Van den Broeke*, F. Leen, M. Aluwé J. Van Meensel, S. Millet

ILVO (Flanders research Institute for Agricultural, Fisheries and Food), Melle, Belgium.

The choice between raising immunocastrates or entire males as an alternative to barrows, has implications in terms of growth performance and carcass quality. Studies conducted in experimental conditions may not reflect reality on pig farms.

In this study, we wanted to investigate the differences between barrows (BA), entire male pigs (EM) and immunocastrates (IC) under commercial conditions in Belgium: fed with commercial feed, housed in larger groups and slaughtered at varying slaughter weights.

Conclusion

- ✓ **Evaluation of sexes:**
 - **BA: worst FCR and pay-out**
 - + **IC: higher ADG → more rounds/year**
 - + **EM: higher lean meat %, less fat**
- ✓ **Farm had a significant effect on all parameters, but we found no interactions between farm and sex**

Material and methods



Animals

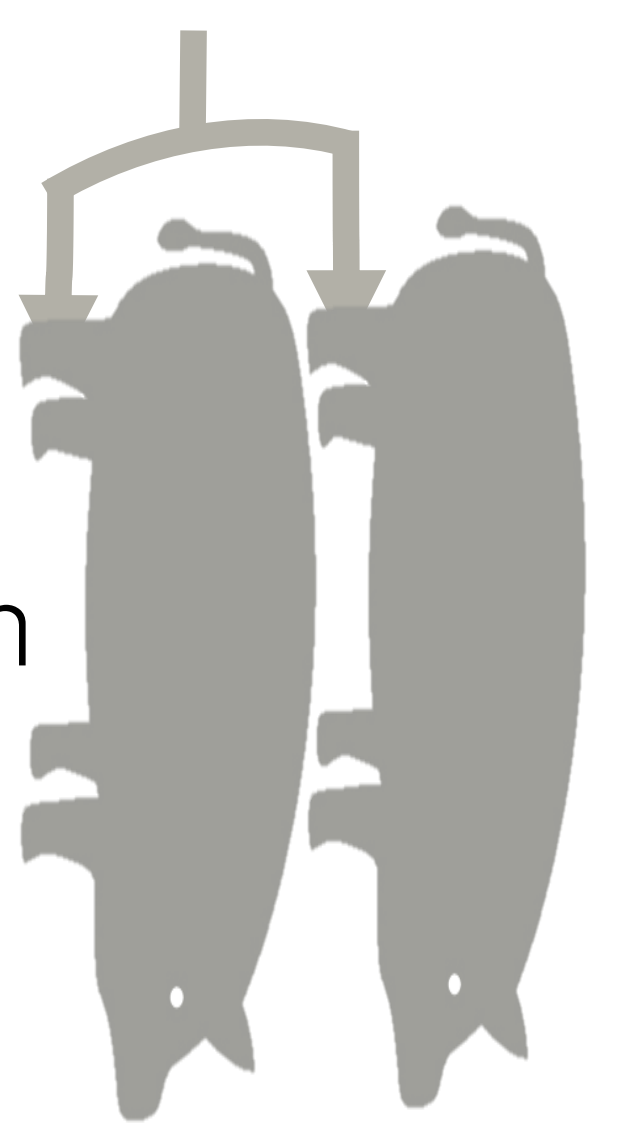
- 3 commercial farms
- Piétrain x hybrid sow
- BA, EM and IC (2nd vaccination 4 weeks before slaughter)

Performance

- ADFI: daily feed intake
- ADG: daily gain
- FCR: feed conversion ratio

Carcass quality

- between 99 and 138 kg
- individual data collection



Results

	Barrows (BA)	Entire male pigs (EM)	Immunocastrates (IC)
# pens	Farm A: 8, Farm B: 10, Farm C: 24	Farm A: 8, Farm B: 10, Farm C: 24	Farm A: 8, Farm B: 10, Farm C: 24
# animals	Farm A: 72, Farm B: 88, Farm C: 74	Farm A: 59, Farm B: 93, Farm C: 73	Farm A: 87, Farm B: 95, Farm C: 73
Performances	<ul style="list-style-type: none"> • Highest ADFI • Higher ADG • Higher FCR 	<ul style="list-style-type: none"> • Lowest ADFI • Lower ADG • Lower FCR 	<ul style="list-style-type: none"> • Intermediate ADFI • Higher ADG • Lower FCR
Carcass quality	<ul style="list-style-type: none"> • Higher dressing % • Lowest lean meat % • Highest backfat thickness 	<ul style="list-style-type: none"> • Lower dressing % • Highest lean meat % • Lowest backfat thickness 	<ul style="list-style-type: none"> • Lower dressing % • Intermediate lean meat % • Intermediate backfat thickness

