

Large litter challenges

Geneticists are to blame
where will it end

CONCLUSION

Does genetic improvement of purebred pigs translate into phenotypic improvement of production pigs?



1. Yes.


2.

Do large litters give challenges?

Conclusion

- h^2 and t for litter quality traits are **low to moderate**
- Genetic correlations between litter quality traits and fertility are **moderate**

Genetic correlations



	LBP	SBP	TBP	WP	LW	<u>Birth weight</u>	SDB	#<1kg
<u>Live born</u>		0.62± 0.26	0.92± 0.05	0.49± 0.23	0.27± 0.21*	-0.38± 0.16	0.14± 0.23*	0.37± 0.21*

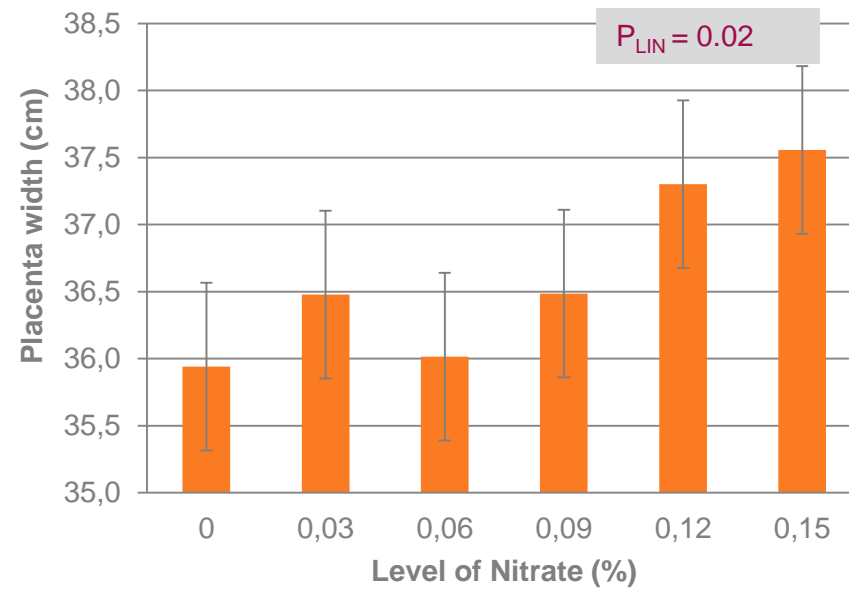
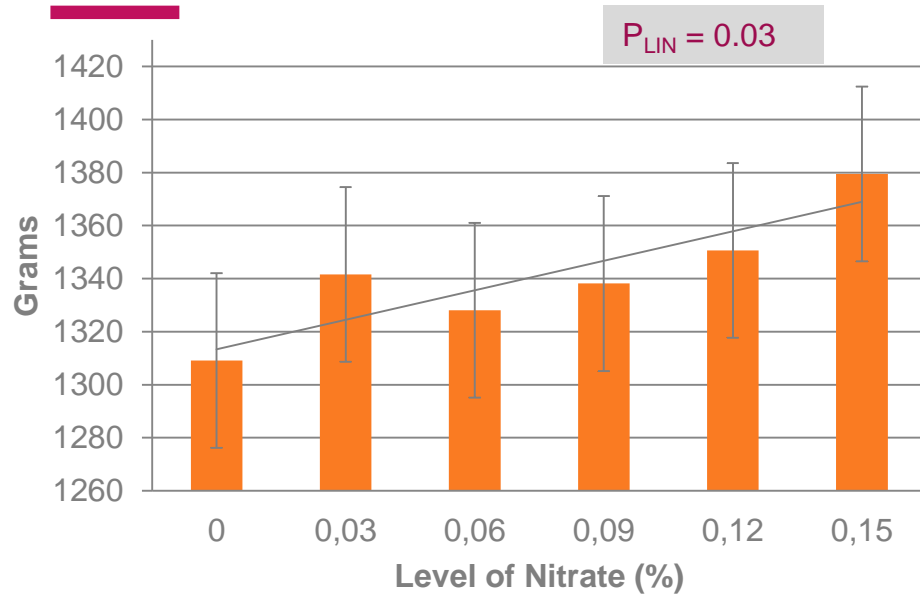
Are farmers good observers?

<u>Category</u>	<u>Scoring breeders (n)</u>	<u>Scoring based on individual birth weights (n)</u>
1	388	328
2	324	1,151
3	1,075	1,093
4	1,551	759



Can we PREVENT problems?

Increased birth weight is caused by an increased placenta size



- Piglet birth weight increased linearly which might be caused by an increased placenta width and numerically improved placenta length ($P = 0.12$) with increased dosage.



Can we CURE problems?

CONCLUSION

Can milk replacer reduce mortality in large litters without compromising litter weaning weight?

YES: Milk replacer could reduce mortality in large litters and increase litter weaning weight – at least in very large litters.

However, it was achieved on the expense of reduced individual weaning weight

Piglet production is only relevant
because of finishers;
are the challenges relevant?

Conclusions

Piglets with high birth weight grew faster and were leaner at 100 kg

Confirms large litters – performance conflict

Large variation between farms

Solutions

- Stop animal selection ?
- Change breeding goal ?
- Combine genetics and physiology; find the limiting factors ?
- Live with it and solve problems with management ?
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- Organize a full session on this next year in Ghent?