

Entire male production without mixing of unknown pigs

Lotta Rydhmer, Lisa Eriksson,
Monica Hansson, Kristina Andersson

Swedish University of Agricultural Sciences



Our motive

Mixing of unknown pigs is bad

Mixing of entire males is worse

Raise sexes separately and avoid mixing?

Small groups in many pens - expensive!

Piglets from several litters can meet without fighting at 2 weeks of age

Pilot study in two phases

1. Piglet period, 24 litters
2. Growing-finishing period and slaughter, 96 male pigs

Compared “friends” and control pigs

Parallel IRTA study by Fabrega et al, see poster 3:13



Recordings

Growth rate

Activity (standing or lying), scan samples

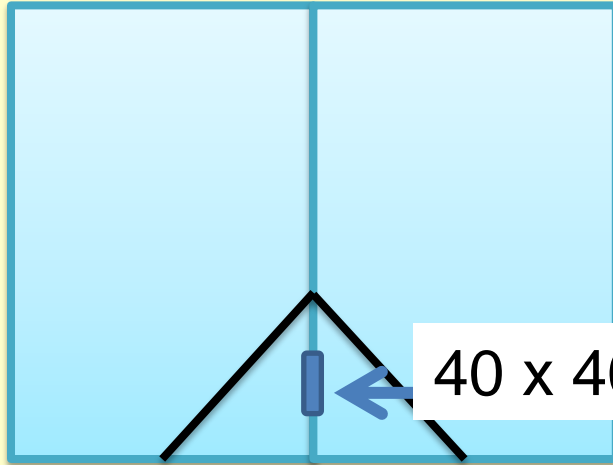
Aggressive and sexual behaviour, frequencies

Skin lesions during rearing and after slaughter

Testis weight at slaughter

Skatole and androstenone (not analysed yet)

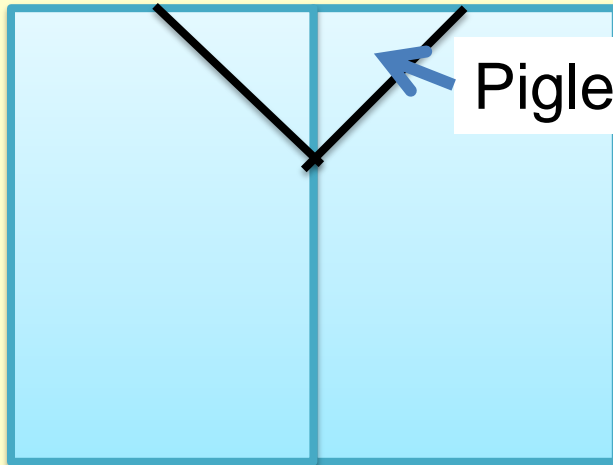
Friends pens



Farrowing pens with solid walls and no crates

40 x 40 cm opening, from day 12

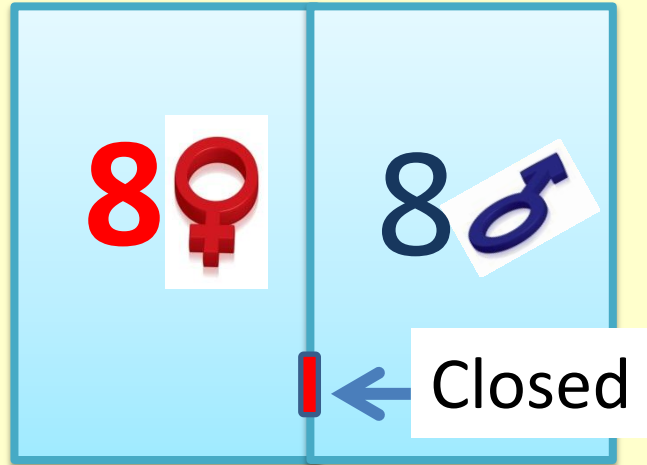
Control pens



Piglet corner



Friends pens



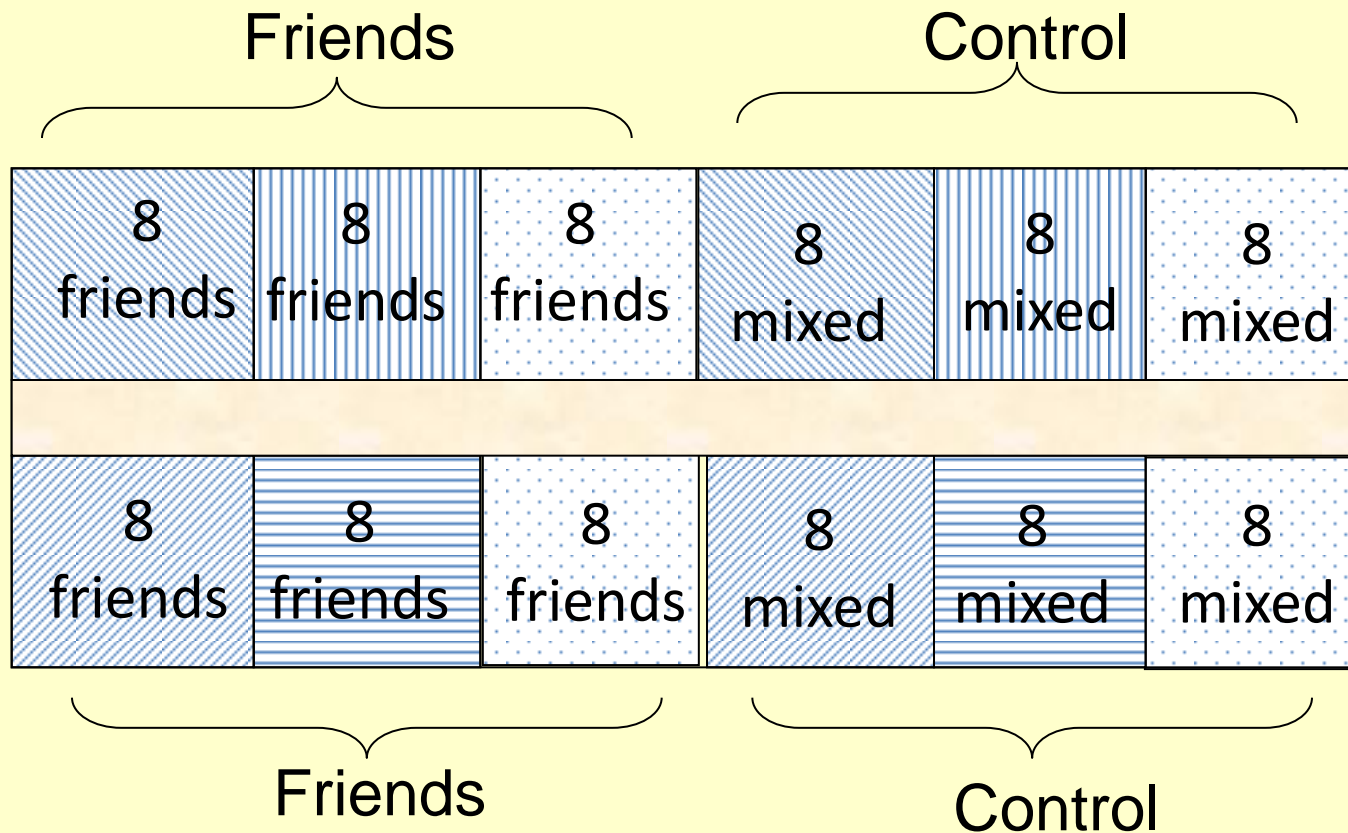
Weaned at 4-5 wk

Moved to growing-finishing unit at 10 wk

Control pens



96 males studied during **growing-finishing phase**



Friends moved here in intact groups

Control pigs mixed (2-3 litters) when moved



At slaughter

Friends slaughtered entire pen together, at mean weight of 115 kg. No mixing with unknown pigs

Control pigs slaughtered based on individual weight. Mixed with unknown pigs during transport and at slaughter plant. 2-3 occasions per pen

Results, piglet phase

1.0 nursing/hour for both friends and control sows

Very few piglets missed a nursing by their sow

Very few piglets suckled the other sow

No sow was aggressive to the other piglets



Results, piglet phase

Friends

Control

Growth rate, g/d

1st wk after opening

310

300

ns

1st wk after weaning

190

210

ns

Active daytime, %

1 d after opening

19

15

ns

just after weaning

31

25

No. mountings per pair of pens, 4 min

1 d after opening

0.7

0.5

ns

just after weaning

0.5

0.3

ns

Results, piglet phase

	Friends	Control	
<i>No. aggressive interactions per pair of pens, 4 min</i>			
1 d after opening	3.1	2.7	ns
just after weaning	1.6	1.0	ns
<i>Pigs with at least one skin lesion, %</i>			
1 d after opening	76	46	***
just before weaning	25	48	***
1 wk after weaning	24	31	ns

Note: also very small lesions were counted

Results, growing-finishing phase

	Friends	Control	
<i>Growth rate, g/d</i>			
1-2 weeks	716	597	p=0.12
2-4 weeks	886	926	ns
start - slaughter	957	928	ns
<i>Testis weight, g</i>	520	554	ns
<i>No. pigs with skatole >0.20 ppm</i>	5 (47)	3 (46)	

Results, growing-finishing phase

	Friends	Control	
<i>Active daytime, %</i>			
1 st day (30 kg)	56	43	p=0.09
at 60 kg	43	44	ns
at 110 kg	33	35	ns
<i>No. mountings per pen, 4 min</i>			
1 st day (30 kg)	0.4	0.2	*
at 60 kg	0.3	0.5	p=0.11
at 110 kg	0.6	0.7	ns

Results, growing-finishing phase

	Friends	Control	
<i>No. aggressive interactions per pen, 4 min</i>			
1 st day (30 kg)	1.4	1.8	ns
at 60 kg	1.3	1.1	ns
at 110 kg	0.6	0.3	ns
<i>No. long-lasting aggressive interactions per pen, 4 min</i>			
1 st day (30 kg)	0.35	0.78	**
at 60 kg	0.11	0.11	ns
at 110 kg	0.04	0.05	ns



Results, growing-finishing phase

	Friends	Control	
<i>No. small skin lesions per pig</i>			
2 nd day (30 kg)	14	26	***
at 60 kg	15	18	ns
at 110 kg	15	17	ns
<i>No. deep skin lesions per pig</i>			
2 nd day (30 kg)	0.0	4.4	*
at 60 kg	0.1	0.0	ns
at 110 kg	0.0	1.6	*

Skin lesions at slaughter, % of pigs

I



II



III



IV



V



Friends

75

21

4

0

0

Control

13

26

30

11

20



Summary

- Piglets from two litters can meet at 12 days without fighting
- Entire males from two litters can be grouped and separated from their sisters at weaning without fighting

Entire males kept in such intact groups

- fight less than “mixed pigs” when moved to the rearing-finishing unit, and get less skin lesions
- tend to show less sexual behaviour at 60 kg

No difference in

- aggressive behaviour later on
- growth rate
- puberty and boar taint (?)

Less skin lesions when entire males are sent to slaughter in intact groups (no mixing)

Photo: Lisa Eriksson and Monica Hansson

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