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Session 36
Poster 27

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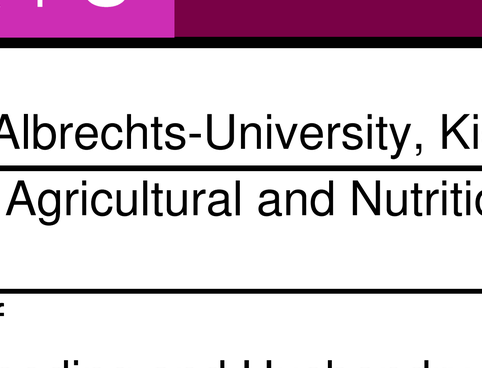
GELAS: Group housing of lactating sows with electronically controlled crates

Does a running area increase animal welfare and litter performance?

Material and Methods

112 cross-bred sows were compared in 10 batches. 6 sows were moved in the group housing system and 6 sows in conventional single housing systems 1 week before farrowing. The weaning age was about 26 days. Litter information, piglet mortality rate, sow condition and the behaviour of sows and piglets were recorded.



Electric eye

(Sow walks in the running area)

Ear chip identification

(Sow walks in the farrowing crate)

Group housing (GH)	Single housing (SH)
➢ Crate with electronically controlled gates	➢ Conventionell farrowing crate
➢ Running area (13 m²) between the pens	➢ Stay in their pens
➢ Sows are fixed 3 days a.p. until 1 day p.p. in the farrowing crate	➢ Sows are fixed the whole time in the farrowing system
➢ Piglets could move in the running area from their 5th day of lifetime forward	➢ Piglets stay in their own pens

Results

The litter performance was not significantly different among the housing systems (Tab. 1) except the weaning weights with 7.6 kg in the SH and 7.2 kg in the GH. 0.2 piglets/ litter in the GH were crushed in the running area between 8 to 11 day of lactation. GH-sows lost more body condition during lactation (GH: 3.3 to 2.2 BCS vs. SH: 3.2 to 2.4 BCS), although the feed intake was enhanced in the GH (LSM: 6.0 kg vs. 5.7 kg in the SH). Due to injured teats caused by the piglets 8 gilts had to be weaned before the 26th lactationday in the GH (vs. 2 in the SH). The sows' duration of staying in the farrowing crates decreased daily from 1340 min/d 4 days p.p. to 713 min/d for sows and 404 min/d for gilts 11days p.p. (Fig. 1).

Tab. 1 LSMeans and standard error of litter performance

	GH		SH	
	LSM*	(SE)	LSM*	(SE)
Piglets born alive/ litter	14.0	(0.5)	14.6	(0.5)
Piglets stillborn/ litter	1.4	(0.2)	1.1	(0.2)
Piglets mumfied/ litter	0.5	(0.1)	0.4	(0.1)
Move to nursery piglets/ litter	- 0.4	(0.4)	-1.0	(0.4)
Piglet losses/ litter	2.2	(0.3)	2.3	(0.3)
Piglets weaned/ litter	11.4	(0.2)	11.4	(0.2)
Piglets weaning weight (kg)	7.2[a]	(0.1)	7.6[b]	(0.2)

*Values with different characters are significant

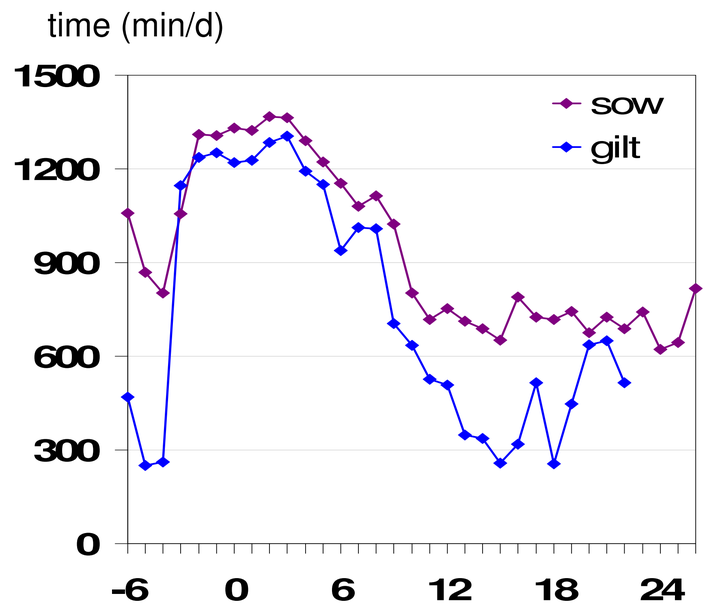


Fig. 1
Daily time of duration in the crate

Conclusion

- no different number of piglets weaned but decreased weaning weights for GH piglets
- GH-sows needed more energy during lactation
- GH less practical for first parity sows

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