

ELEVATED FLOOR DID NOT REDUCE THE OVERALL PIGLET MORTALITY

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Background and Objective

During lactation, crushing is the main cause of death for piglets, with the majority being crushed the first days after farrowing. The objective of the present study was to reduce piglet mortality by preventing temporarily confined sows from crushing piglets the first four days after farrowing.

Materials and Methods

Piglet mortality was monitored in 12 farrowing weeks (blocks) from farrowing until litter equalization in 999 litters and from litter equalization until day 4 after farrowing in 1,271 litters. Sows ranged from 1st to 10th parity and included sows nursing own piglets and nurse sows fostering litters with small or normal piglets. All sows were confined during the trial period. From parturition until litter equalization and from litter equalization until day 4, 491 and 625 sows, respectively, and their litters were housed in pens with elevated floor where the floor under the sows was automatically raised when the sow stood up. When the sow lay down again, the floor would

move back down. From parturition until litter equalization and from litter equalization until day 4, 508 and 646 sows and their litters were housed in similar pens, the only difference being that the elevated floor was deactivated. 123 dead piglets were collected before litter equalization from 5 blocks and 185 dead piglets were collected after litter equalization from 2 blocks for autopsy.

Results

The overall piglet mortality from farrowing until litter equalization and from litter equalization until day 4 after farrowing did not differ between litters from sows in pens with activated elevated floor and sows in pens with deactivated elevated floor ($P=0.555$ and $P=0.351$, respectively). Compared with the sows in pens with deactivated floor, there was a tendency ($P=0.091$; Table 1) in pens with elevated floor to fewer piglets dying from crushing. The autopsy revealed that 77% of piglets dying from crushing had an empty stomach at the time of death.



In the study the floor under the sows was automatically raised when the sow stood up. When the sow lay down again, the floor would move back down. (Photo: SEGES)

TABLE 1 Effects of activated and deactivated elevated floor on piglet mortality and proportion of piglets dead from crushing

	Activated elevated floor	Deactivated elevated floor	P-value
Liveborn pigs pr. litter	18.5	18.7	
Piglets per litter at equalization	14.4	14.3	
Piglet mortality before equalization, %	1.8	1.7	0.555
Crushing, % of dead piglets	62.2	66.3	0.677
Piglet mortality after equalization, %	4.2	4.6	0.351
Crushing, % of dead piglets	68.7	80.0	0.091

CONCLUSION

The overall piglet mortality was not reduced in litters raised by temporarily confined sows in pens with automatic, elevated floors. However, the activated elevated floor reduced the proportion of piglets dying from crushing.

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