



# Associations between straw provision, behaviour, ear and tail lesions in undocked pigs

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Detection

Prevention

Tail biting

**Exploratory behaviour** 

**Production** 

Welfare





#### Reduce impact



Detection of tail biting

**Improve welfare** 





## How to detect tail biting?







Moving in to stable



**Every day** 



Every second week



First pig sent to slaughter





## How to detect tail biting?







## Main results

	Tail Lenght	Tail Damage	Ear Damage	Active Perc	Straw Directed Behaviour	Pig Directed Behaviour	Pen Directed Behaviour	Beh LOS	LOS
Tail Length									
Tail Damage									
Ear Damage		0,42			G	rowe	ers		
Active perc			0,65 0,60						
Straw Directed behaviour	-0,27	-0,45 -0,39	-0,68	0,33					
Pig Directed behaviour		0,46 0,34	0,59 0,56	0,80	-0,60				
Pen Directed behaviour		0,35	0,23 0,67	0,63 0,52	-0,34	0,64			
Beh LOS	0,31		-0,42 0,41	0,66	0,55	0,52 -0,37	0,32		
LOS	0,40		0,60	0,57		0,51	-0,50 0,61	0,66 0,51	



### **Growers**

	D0	D1	D2	D3	D4
Ear Damage	0,30	-0,30	-0,29	-0,26	
Active perc	-0,16				
Straw Directed behaviour					
Pig Directed behaviour	-0,33	0,38	0,31		
Pen Directed behaviour	-0,32		0,17		

	Tail Lenght	Tail Damage	Ear Damage	Active Perc	Straw Directed Behaviour	Pig Directed Behaviour	Pen Directed Behaviour	Beh LOS	LOS
Tail Length									
Tail Damage	0,38								
Ear Damage		0,51 0,42 0,55			Fi	nish	ers		
Active perc		-0,45	-0,37 0,23						
Straw Directed behaviour		-0,31 -0,32 0,25	-0,30 0,44	0,29					
Pig Directed behaviour				0,37	-0,38				
Pen Directed behaviour			0,33 0,29		0,25 0,37	-0,37			
Beh LOS	-0,22	-0,37 -0,44	-0,26 -0,34	0,25	0,56 0,25	0,42	0,29 -0,33 -0,36		
LOS	-0,33	-0,64 -0,53	-0,54- 0,63 -0,48	0,53	0,33 0,33	0,40		0,55 0,25 0,53	



## **Finishers**

	D0	D1	D2	D3	D4
Ear damage	0,30	-0,30	-0,29	-0,26	
Active perc		0,12			
Straw Directed behaviour					
Pig Directed behaviour					
Pen Directed behaviour	-0,18	0,18	0,19	0,16	



Lesion development

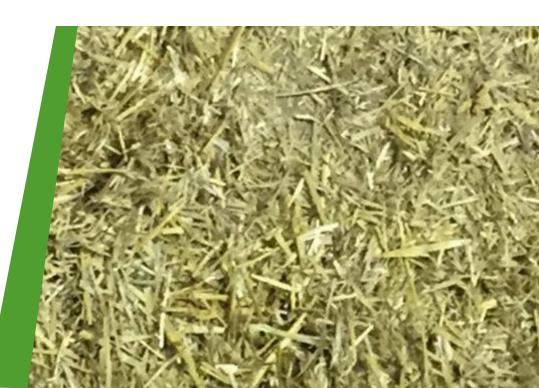
Time consumption



## **Implications**

Farm differences

Who needs to detect what?





Detection of tail biting at early stages is possible, but needs more adaption to practical circumstances.

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