



Agonistic behaviour of weaned piglets

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Can we reduce agonistic behaviour in pigs?

What are the traits and methods to observe the agonistic behaviour?

Data and Analysis

- One sow herd of the breeding company Hülzenberger Zuchtschweine
- 587 female piglets were videotaped for 48 hours immediately after weaning
- Agonistic behaviour traits were described: fighttime, the aggressor/receiver and the winner/loser of a fight
- A dominance index (DI) was calculated ($DI = (wins - defeats) / (wins + defeats)$)
- The DI ranks from -1 (absolutely submissive) to +1 (absolutely dominant)
- Skin lesions were evaluated at weaning and one week later for the anterior, central and caudal third of the body
- Lesion score (LS) ranks from 0 (no wounds) to 4 (many, deep wounds)



Results

Behaviour indicators

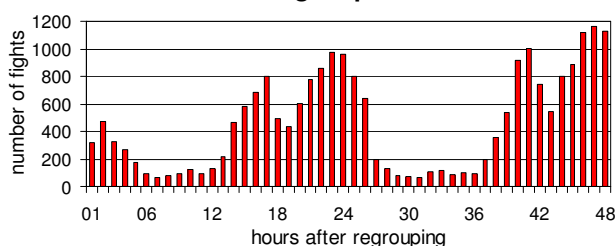
	mean	median	standard error	min.	max.
Fights per pen	446	443	120	242	783
Fights per piglet	44,9	40	23,2	0	139
Fighttime per piglet (sec.)	2775	2421	1913	21	13171
Ø Fightingduration (sec.)	63	29	87,7	1	1114

Dominant vs. submissive piglets^{1,2}

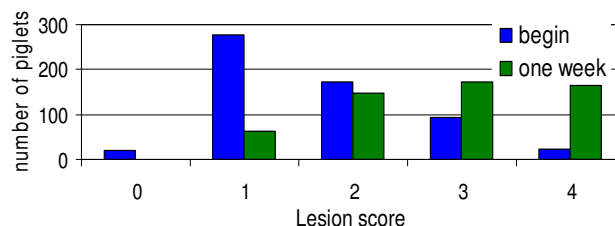
	DI>0	DI<0
Fights per piglet	45 ^{a3}	37 ^b
Fighttime per piglet (sec.)	3297 ^a	1765 ^b
Aggressor of a fight	17 ^a	12 ^b
Fights won	10 ^a	3 ^b
Fights lost	3 ^a	10 ^b

¹median; ²different letters show differences in the median ($p < 0.05$)

Number of fights per hour



LS for the anterior third



- ²Significant differences in behaviour indicators between submissive (DI<0) and dominant (DI>0) piglets
- Dominant piglets with a higher LS difference between the two evaluations ($p < 0.05$)

Conclusion

- There is a high variance in the agonistic behaviour in pigs
- The lesion score could be a practical parameter to demonstrate agonistic behaviour
- Further Analysis with these piglets as growing pigs and gilts will show whether more aggressive piglets become more aggressive sows. Also genetic relationship will be considered

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