

Trial on confinement post-insemination in a conventional breeding farm in Spain

Introduction

In Spain there are more than 80.000 pig farms

In a so huge population of farms there are several models of different type of facilities

Some of these farms are close to the excellence on animal welfare and an important number are new or have renewed facilities

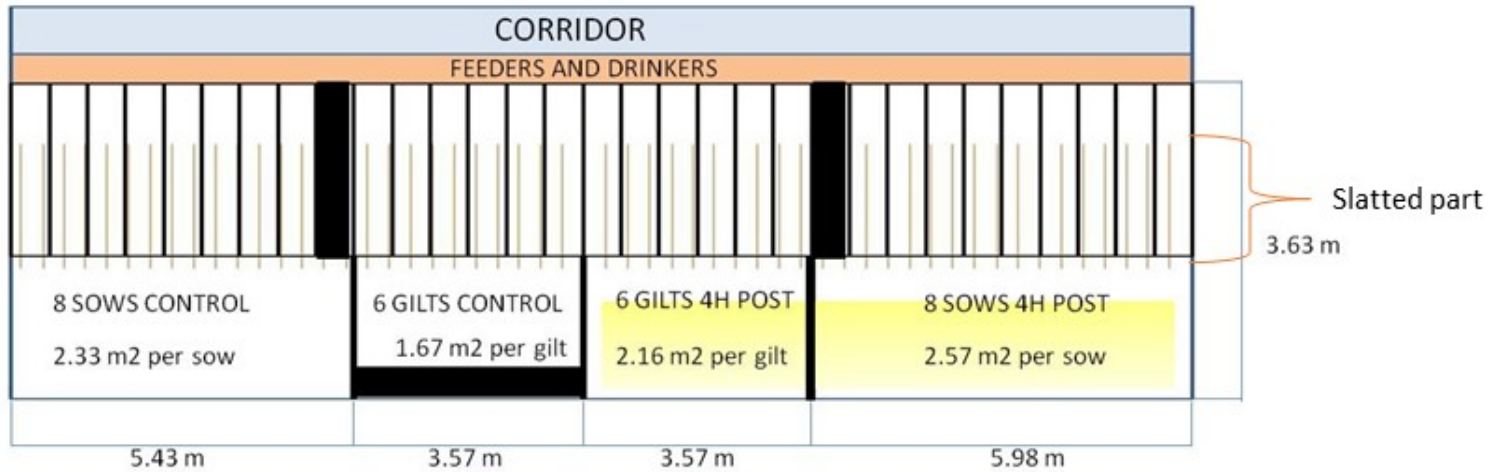
But, how to encourage the owners of old farms, with low capacity of investment on the way of improved welfare for their animals when they see so far these other farms (excellence, new or renewed)

Objectives of the study

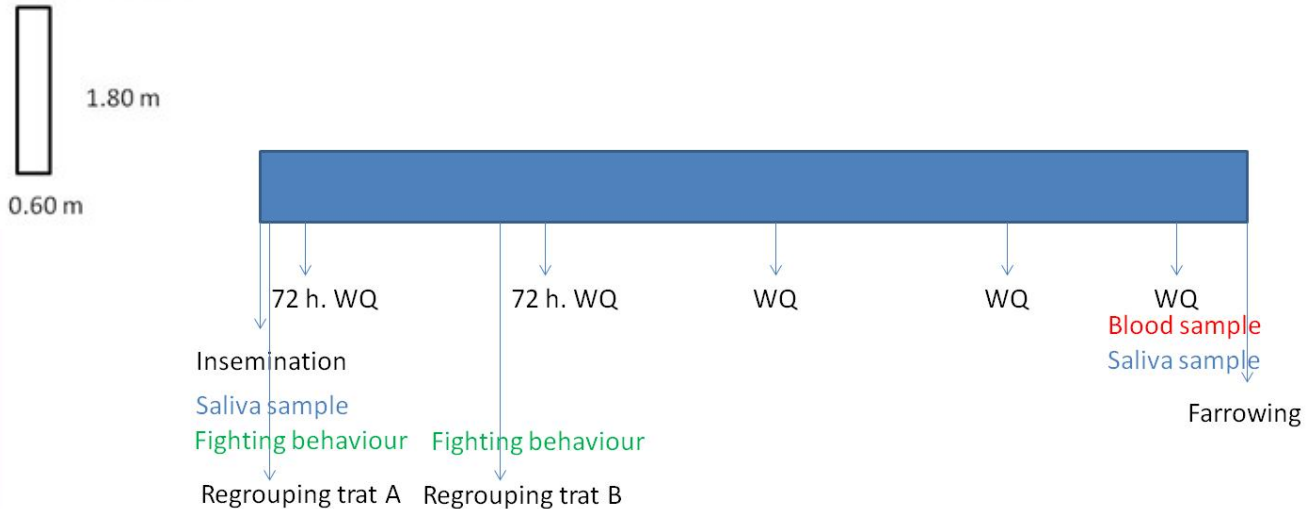
What would be the result on this type of farms of re-grouping sows and gilts 3-4 h post-insemination instead of 28 days (as it is allowed in the Spanish legislation), with provision of straw as bedding material and with a 10% of extra space on behaviour, welfare and reproductive performance

Not in a research center but in a real farm!!!

METHODOLOGY



Detail of a crate



METHODOLOGY

Proposed sample for a complete study

48 sows and 36 gilts in at least three batches



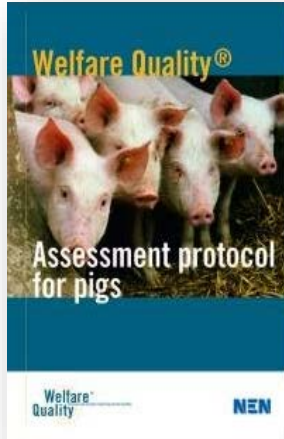
Obtained sample at the moment

26 sows and 12 gilts in two batches



VS

WELFARE QUALITY



Protocol to assess animal welfare worldwide

Animal based protocol

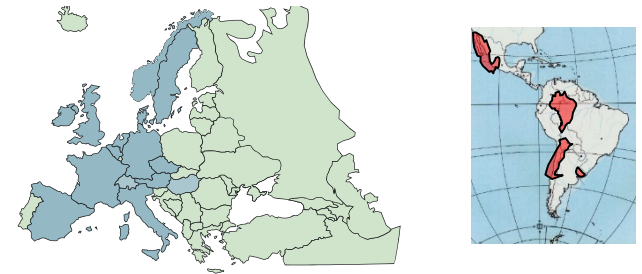
Based on 4 principles and 12 criteria

Used as a certification tool in Spain and Finland

Exploratory behaviour

Negative behaviour

Skin lesions

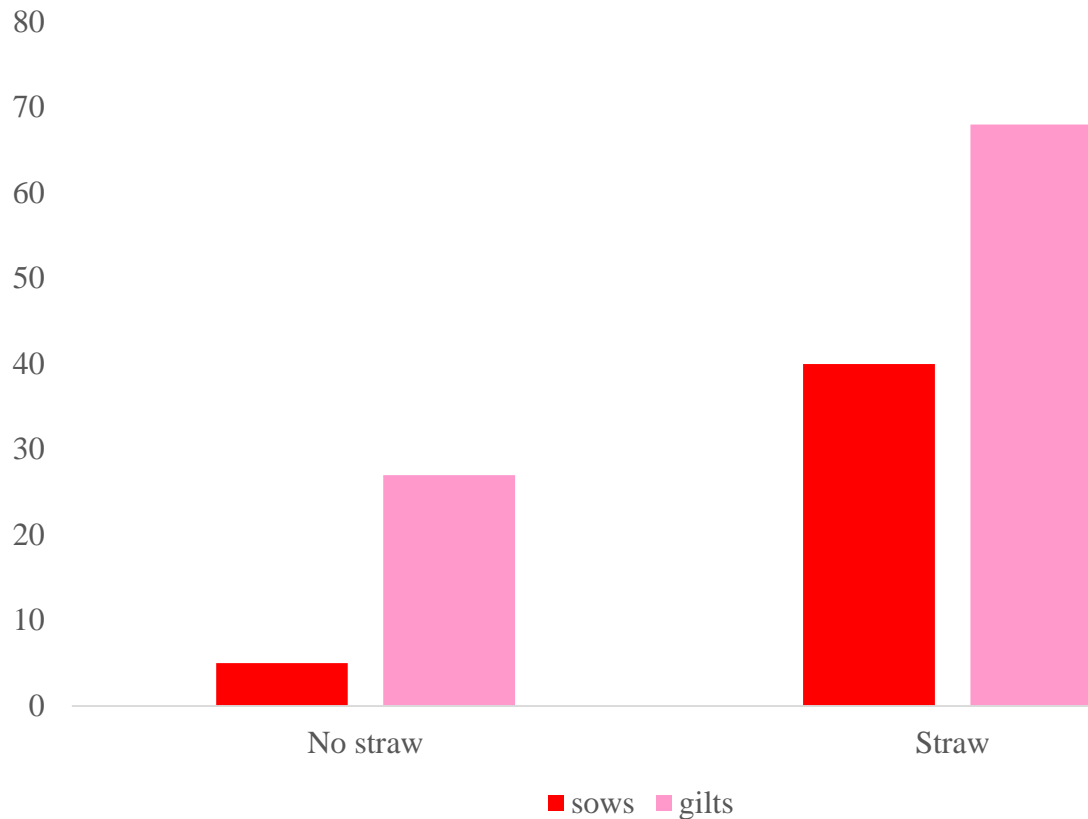


Taken from the measures assessed in this protocol!!!

PRELIMINARY RESULTS

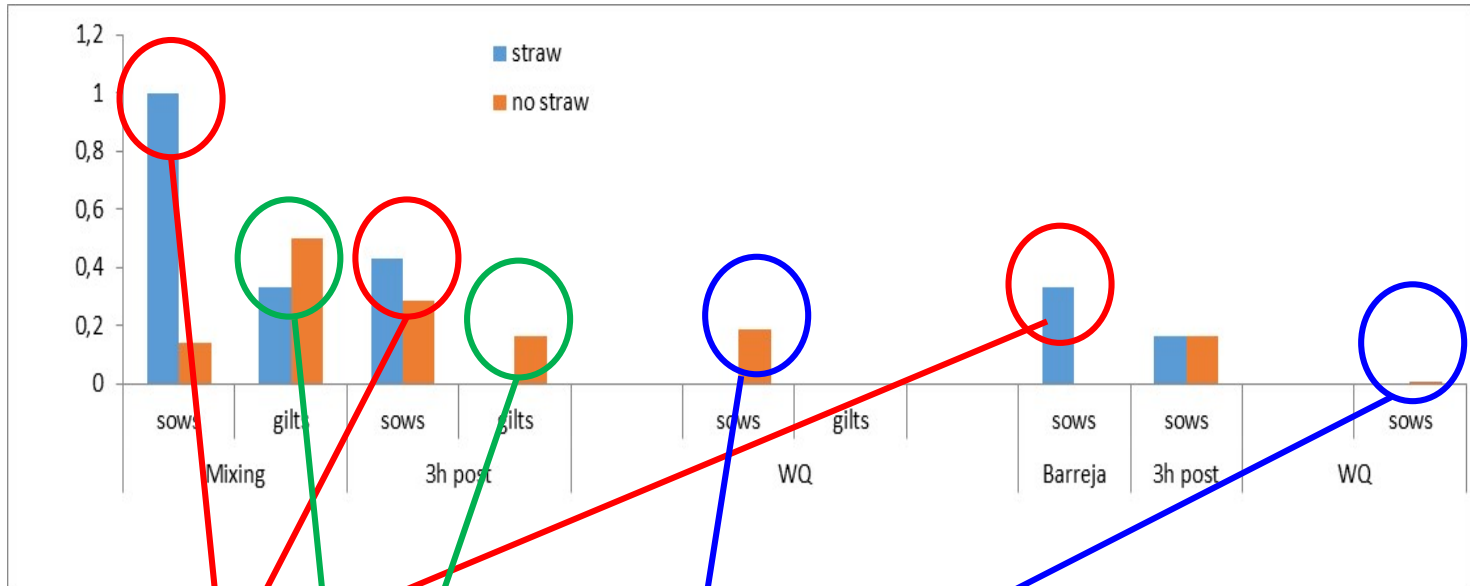
BEHAVIOUR

Exploratory behavior



BEHAVIOUR

Negative social behaviour



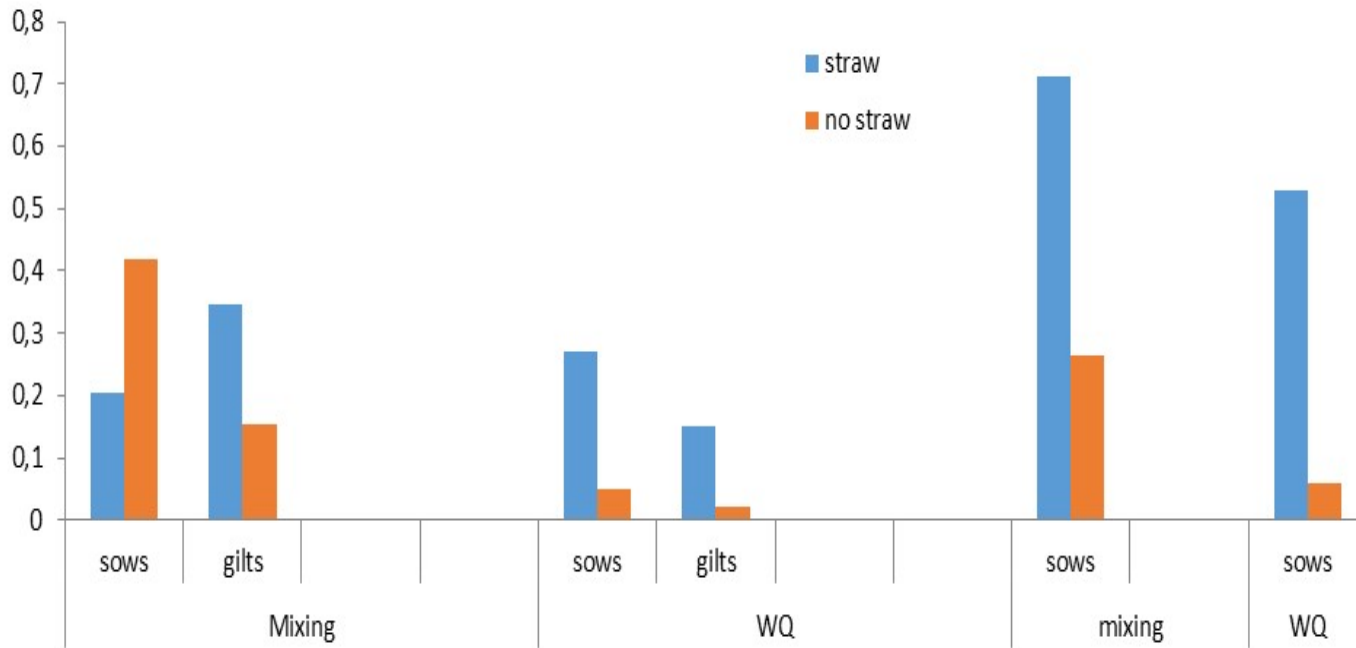
In sows the day of mixing higher in straw than no straw

In sows during the rest of the gestation higher in no straw than straw

In gilts the day of mixing higher in no straw than straw

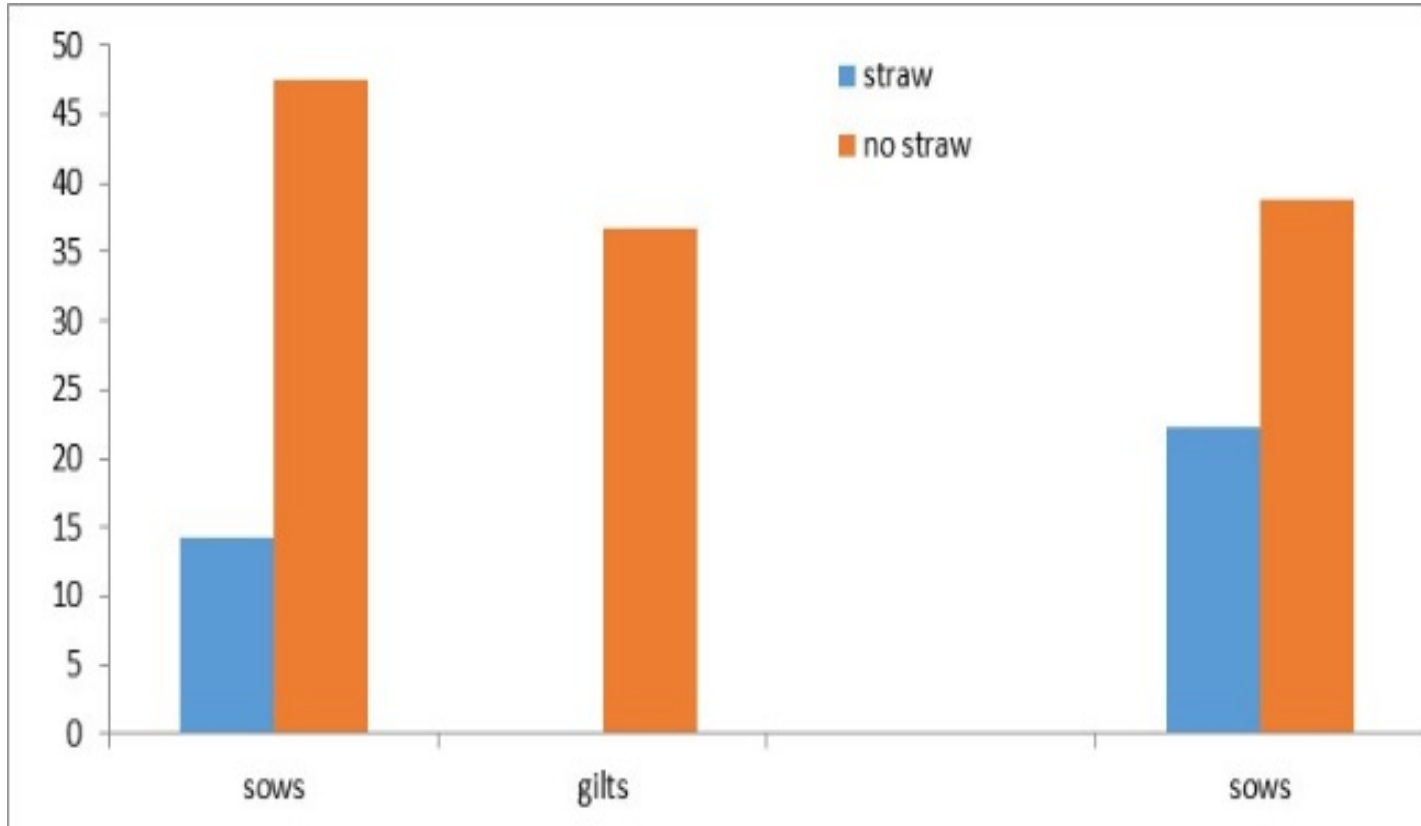
BEHAVIOUR

Skin lesions



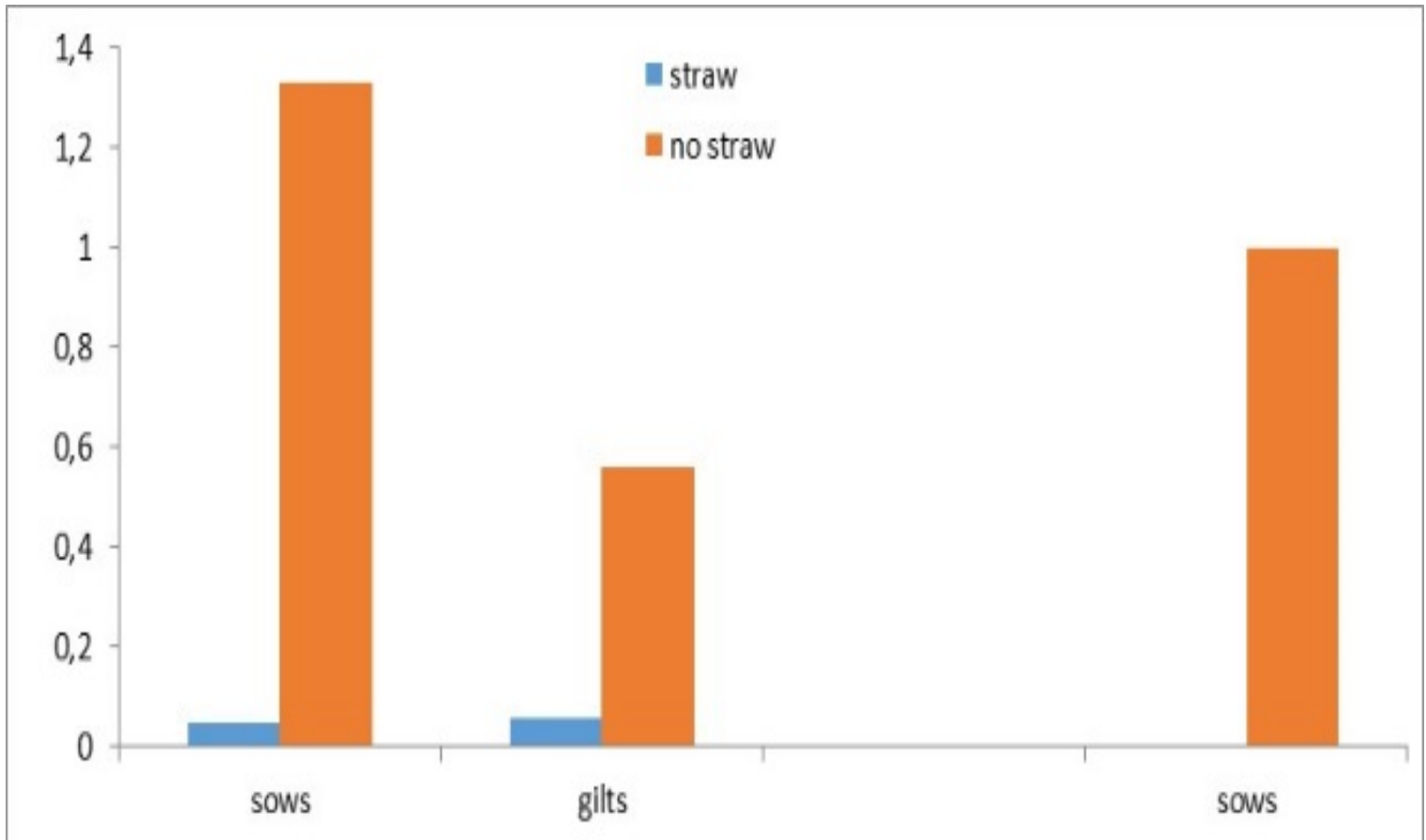
In general, higher with straw than no straw

ANIMAL WELFARE-Stereotypes



Higher without straw

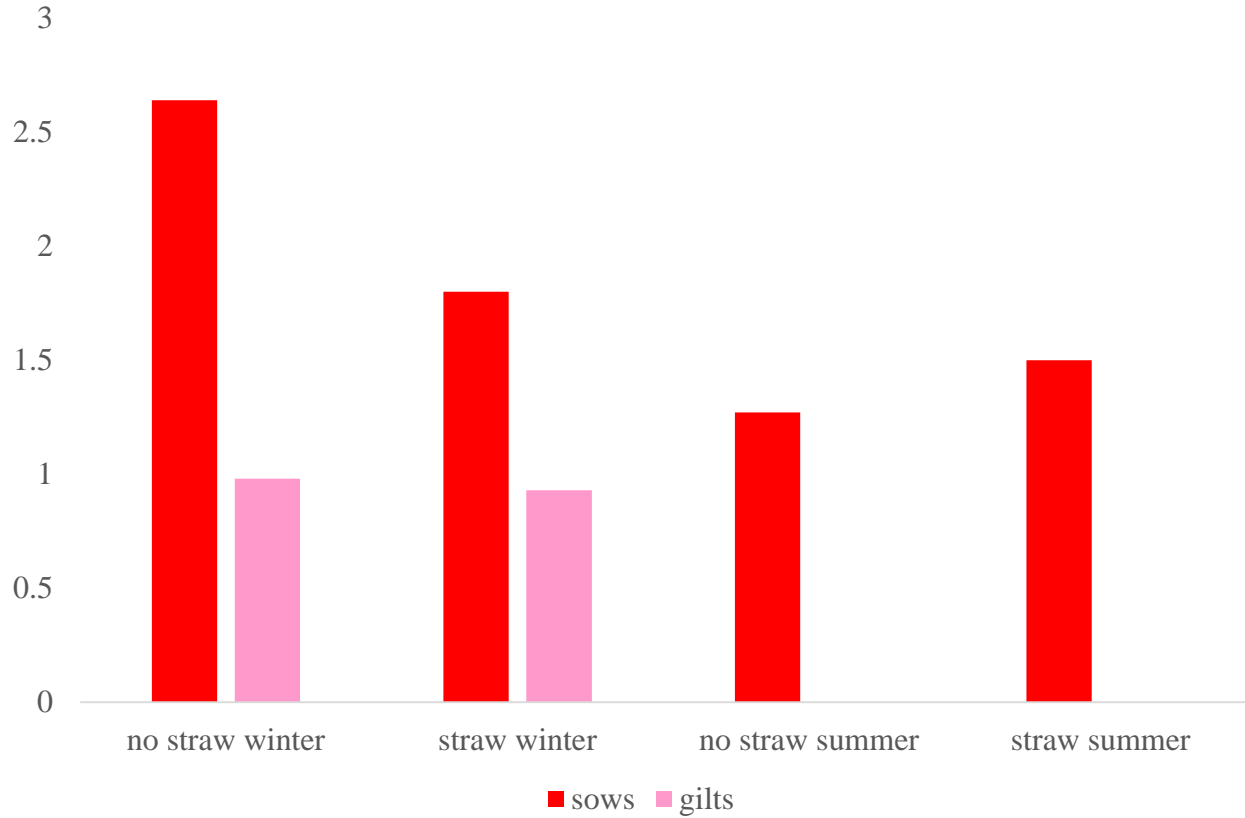
ANIMAL WELFARE-dirtiness



Higher without straw

ANIMAL WELFARE-chronic stress

Neutrophyl/lymphocyte ratio







Different in winter and summer for sows?

Reproductive performance

	Trial in Winter		Trial in Summer	
	STRAW	NO STRAW	STRAW	NO STRAW
Successful insemination	92%	77%	50%	50%
Total piglets per sow	15.3	15.9	12.0	11.3
Total piglets alive	14.3	15.0	7.3 (11.0)	9.7
Mean body weight for piglets	1.19 kg	1.28 kg	1.45 kg	1.37 kg

Although the n is very limited at the moment, it seems that the implantation is better in the group of Straw and re-grouped earlier than in no Straw group. In the farrowing area, the results seem better in no straw

Preliminary conclusions

-  **In the straw treatment there was an increase in the general activity of the animal (exploration)**
-  **This increase in activity and access to resources (straw) can produce a higher incidence of negative social behaviour and skin lesions (competition)**
-  **Clear benefits can be seen in a reduction of stereotypies and dirtiness, but not enough evidence is seen in reproductive performance**
-  **The benefits on chronic stress of straw bedding could be reduced in the summer season**

Next steps

To finish the initial sampling (nowadays around 45%) in a second farm with similar characteristics

Remember these are preliminary conclusions!!!

Thanks a lot!!!

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