



The effect of rubber enrichment device design and amount on the welfare of pregnant gilts



K. O'Driscoll

¹Pig Development Department, Animal & Grassland Research and Innovation Centre, Moorepark, Fermoy, Co. Cork, Ireland; www.teagasc.ie

Conclusion

This floor based enrichment device appeared more attractive to pigs than a hanging device, and could be an effective enrichment device for slatted systems

Introduction

Provision of manipulable material = legal requirement for pigs

- Allows pigs to perform investigatory and chewing behaviour
- Reduces harmful behaviours - tail and ear biting
- Straw, and other organic materials generally favoured by pigs

However

- Provision of loose material not possible in slatted systems
 - Hanging rubber devices are often used instead, as chew toys
- ➔ could a floor device provide additional benefits?

Objective

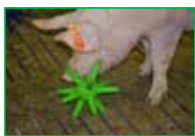
To determine whether a rubber, floor based enrichment device could improve behaviour and reduce lesions in pigs, compared with a hanging fixed point device

Methodology

4 Treatments



- ➔ 1 hanging device / group
- ➔ 3 hanging devices / group



- ➔ 1 floor device / group
- ➔ 3 floor devices / group

- 36 gilts managed as one group provided with treatments
- Treatments applied over time, duration of 4 days each
- 3 day 'control' period (3 hanging + 3 floor) between treatments

Measures

Device measures

- Arm length
- Device weight

Recorded at beginning and end of each treatment period

Health measures

- Ear and tail lesion scores

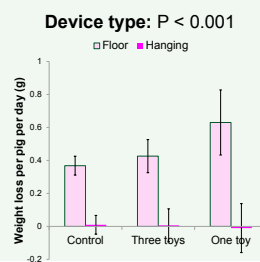
Behaviour measures

- Video recording on last 2 treatment days between 0900 - 1700
- Scan samples at 5 min intervals: No pigs interacting with devices
- 8 behaviour bouts / day analysed for duration and no displacements

Pigs had the same number of interactions with the floor devices, regardless of no. in the pen, and interaction bouts were almost X5 longer than with the hanging devices
Further work planned to elucidate the types of interactions and appealing characteristics!

Results and Discussion

Device weight



Device arm length

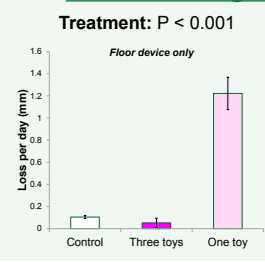


Figure 1. More arm length and weight loss occurred when only 1 provided

Ear and tail lesions

- No effect of device or amount on tail lesions
- Lower ear lesion scores when 3 devices provided than 1 (P < 0.05)

Amount of interactions with the device

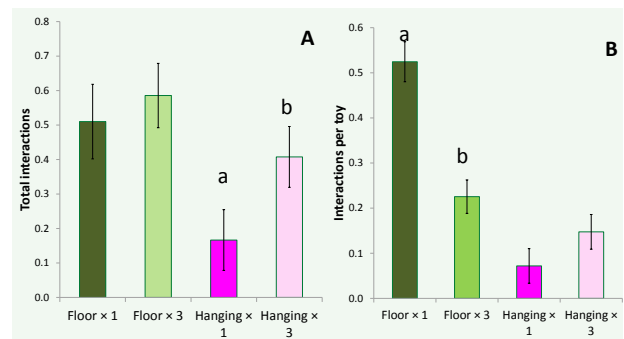
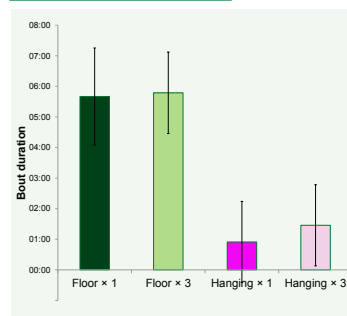


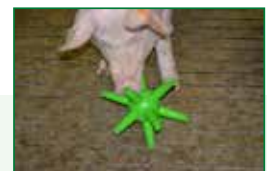
Figure 2. (A) Interactions / group / scan and (B) interactions / toy / scan sample

Interaction duration



No effect of displacements on bout duration, but more displacements when only 1 floor device than any other treatment (P < 0.001)

Figure 3: Duration of interactions



All enrichment devices used in this trial were provided by Easifix: <http://www.easyfix.ie/>