



Effect of stocking density on performance, lesions and soiling

Marijke Aluwé

E. Kowalski, L. De Prekel, A. Van den Broeke, S. Millet

ILVO



Stocking density

Affected by

- ☐ Group/pen size
- ☐ Feed space
- ☐ Floor type
- ☒ Temperature



*De Prekel
et al. 2024*

Effects on

- ☐ Performances
- ☐ Health
- ☐ Functional space
- ☐ Social stress
- ☐ Soiling
- ☐ Emissions
- ☐ Housing cost



Stocking density

Affected by

- ☐ Group/pen size
- ☐ Feed space
- ☒ Floor type
- ☒ Temperature



*De Prekel
et al. 2024*

Effects on

- ☒ Performances
- ☐ Health
- ☐ Functional space
- ☒ Social stress
- ☒ Soiling
- ☐ Emissions
- ☐ Housing cost

stocking
density

0.8 m²

1.0 m²

1.3 m²



reference

<110 kg

0,65 m²/pig

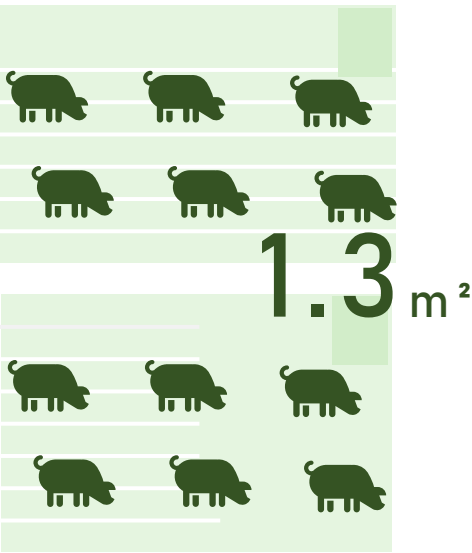
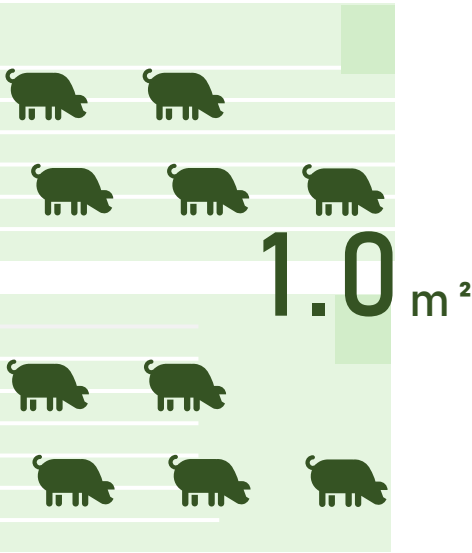
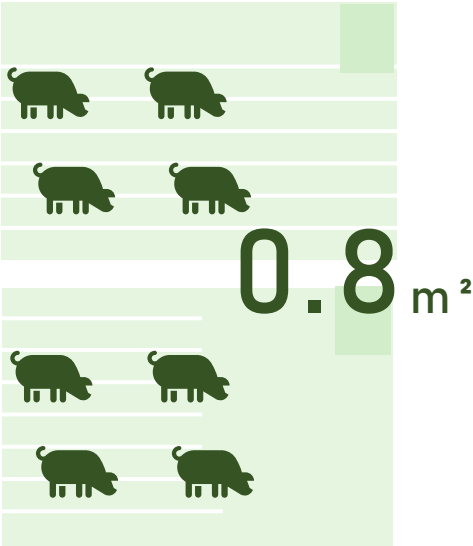
>110 kg

Set-up

FULLY-SLATTED

4,8 m²

HALF-SLATTED

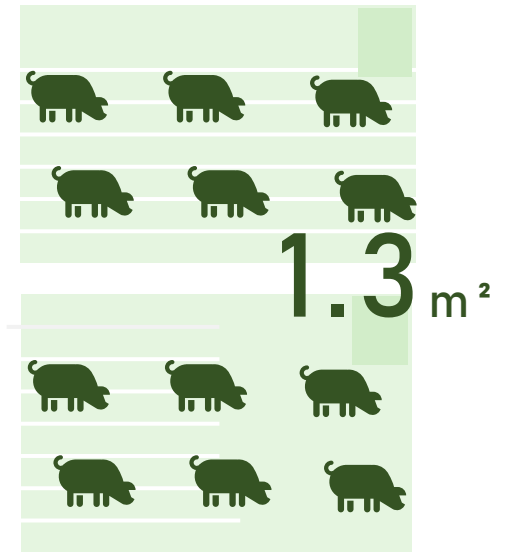
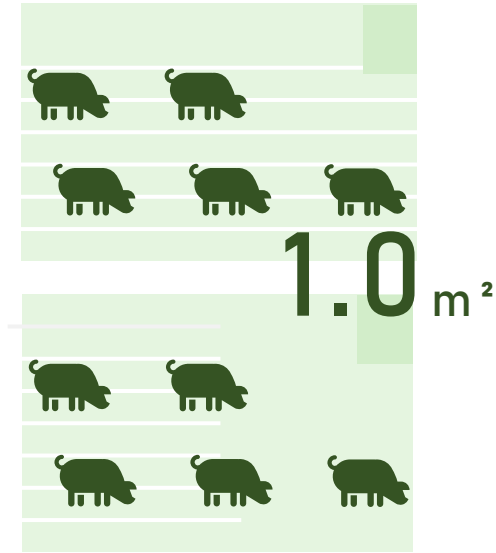
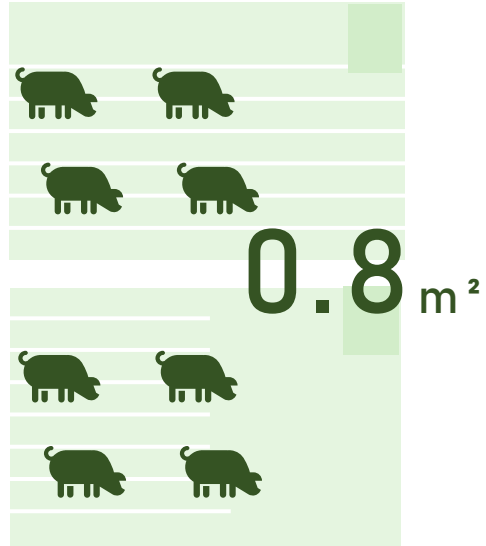


Set-up

FULLY-SLATTED

4,8 m²

HALF-SLATTED

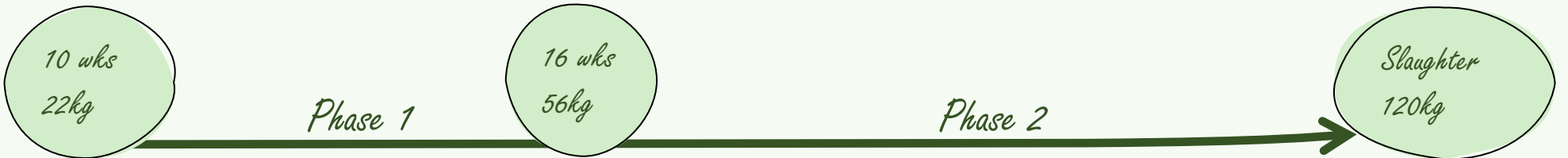


Measurements



Performance

Carcass Q



V

V

V

V

V

Soiling Lesions

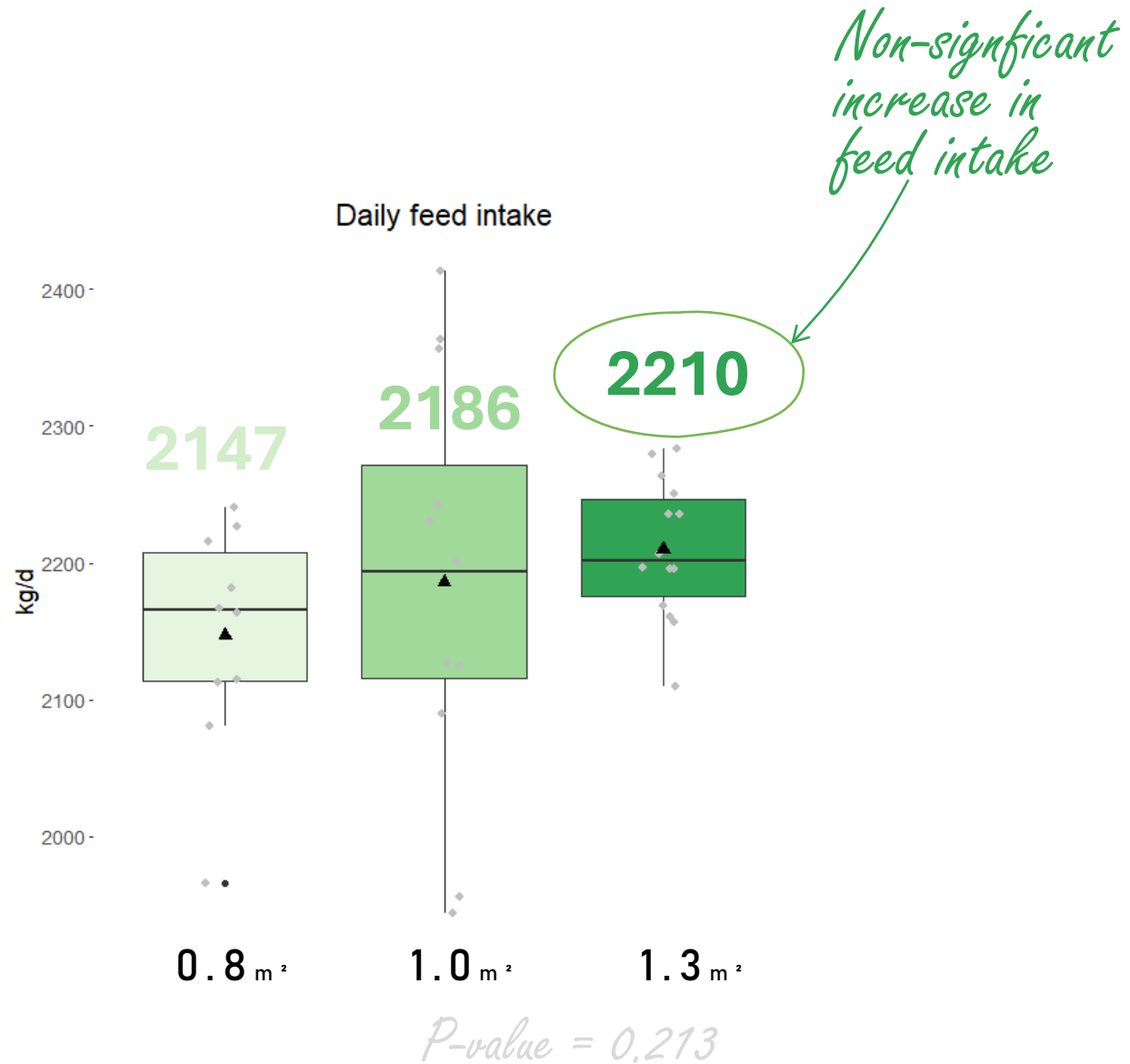




Performance



Performance



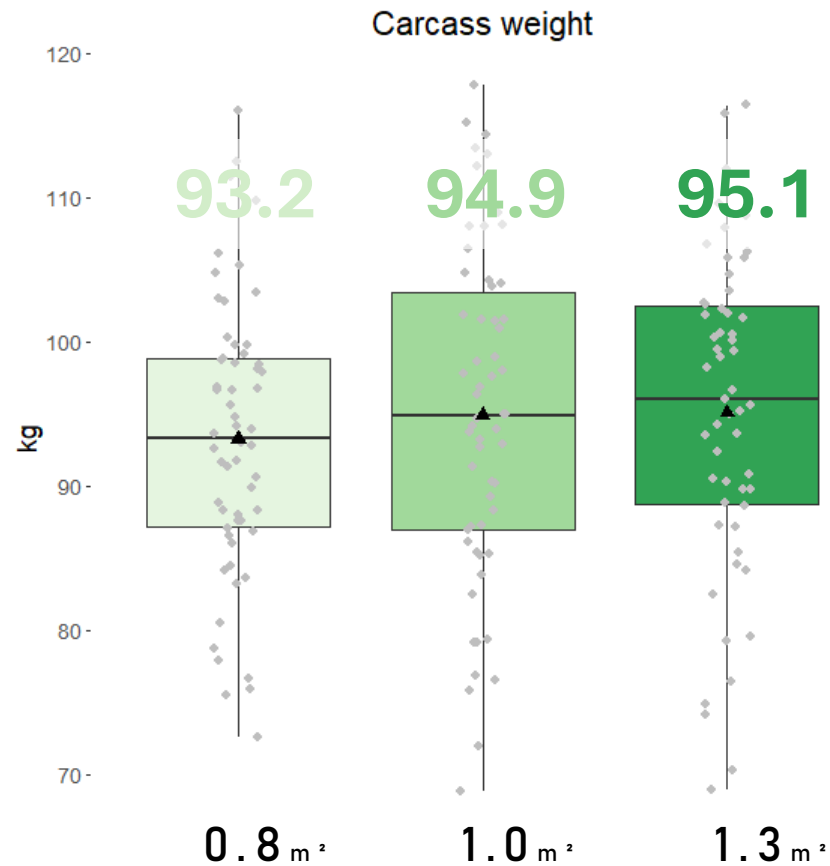


Performance

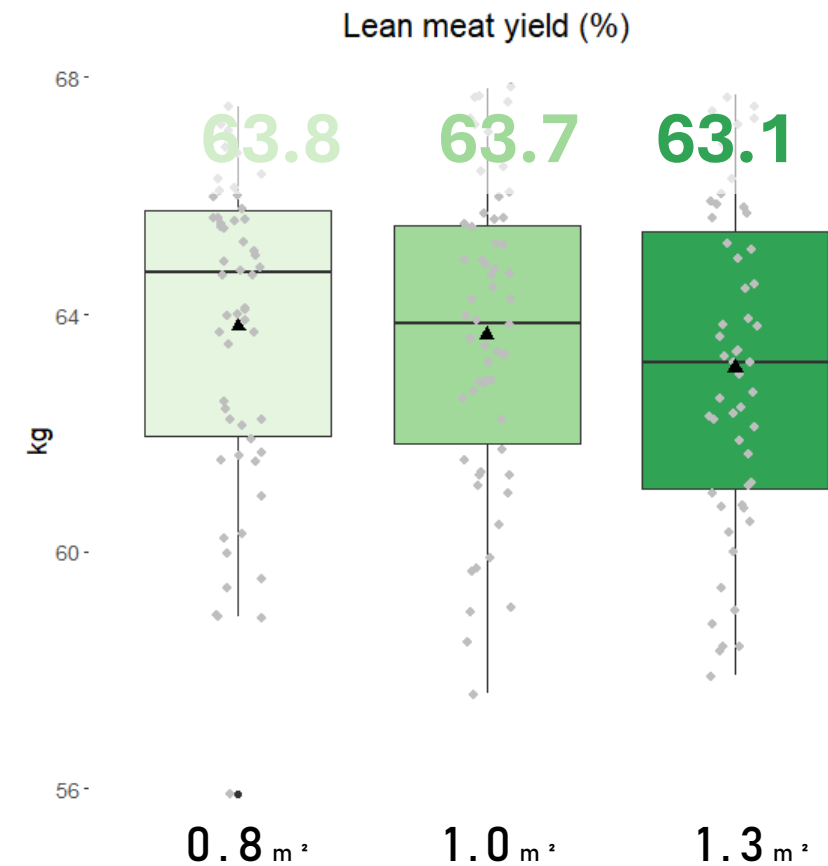




Carcass quality



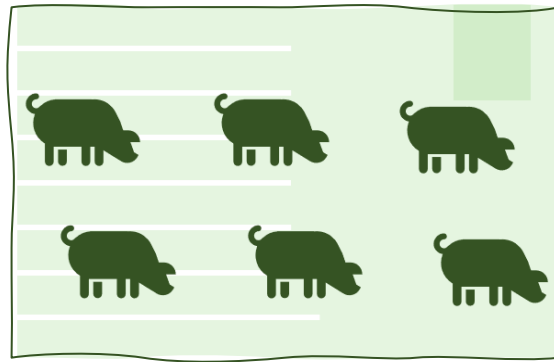
P-value = 0.777



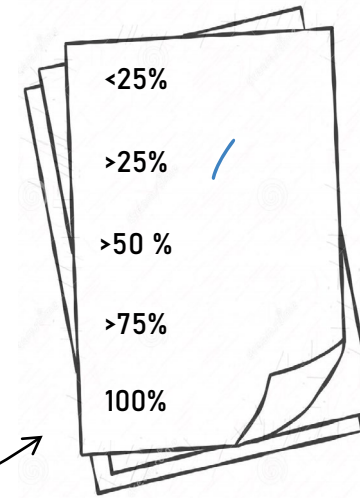
P-value = 0.291



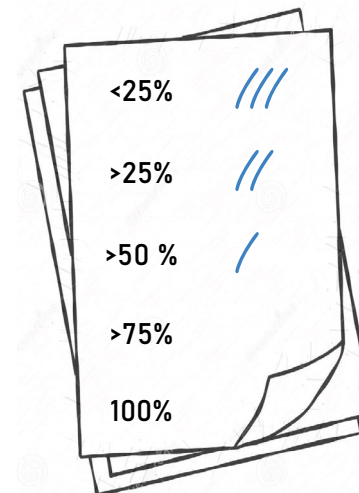
Soiling



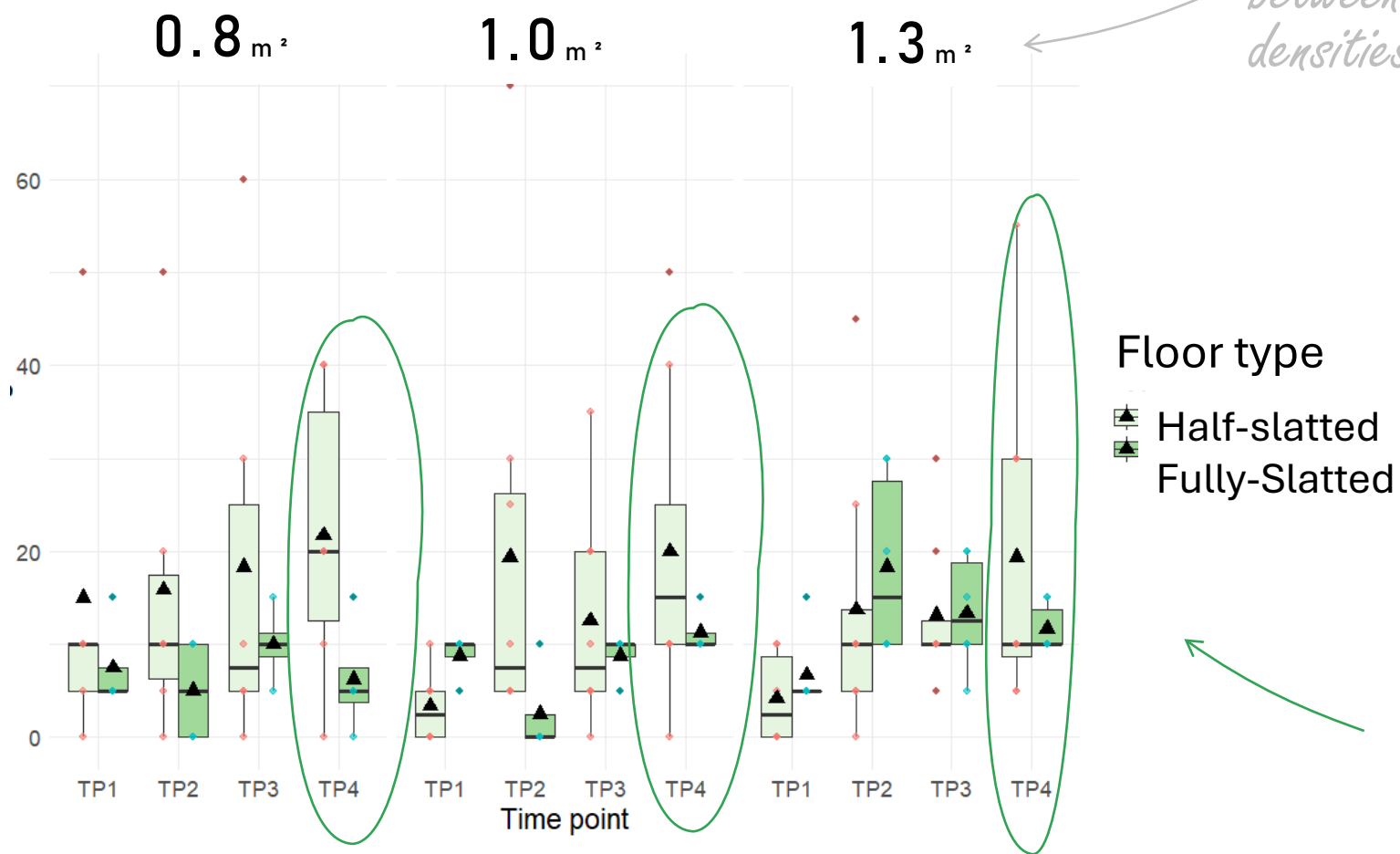
At pen level



At pig level



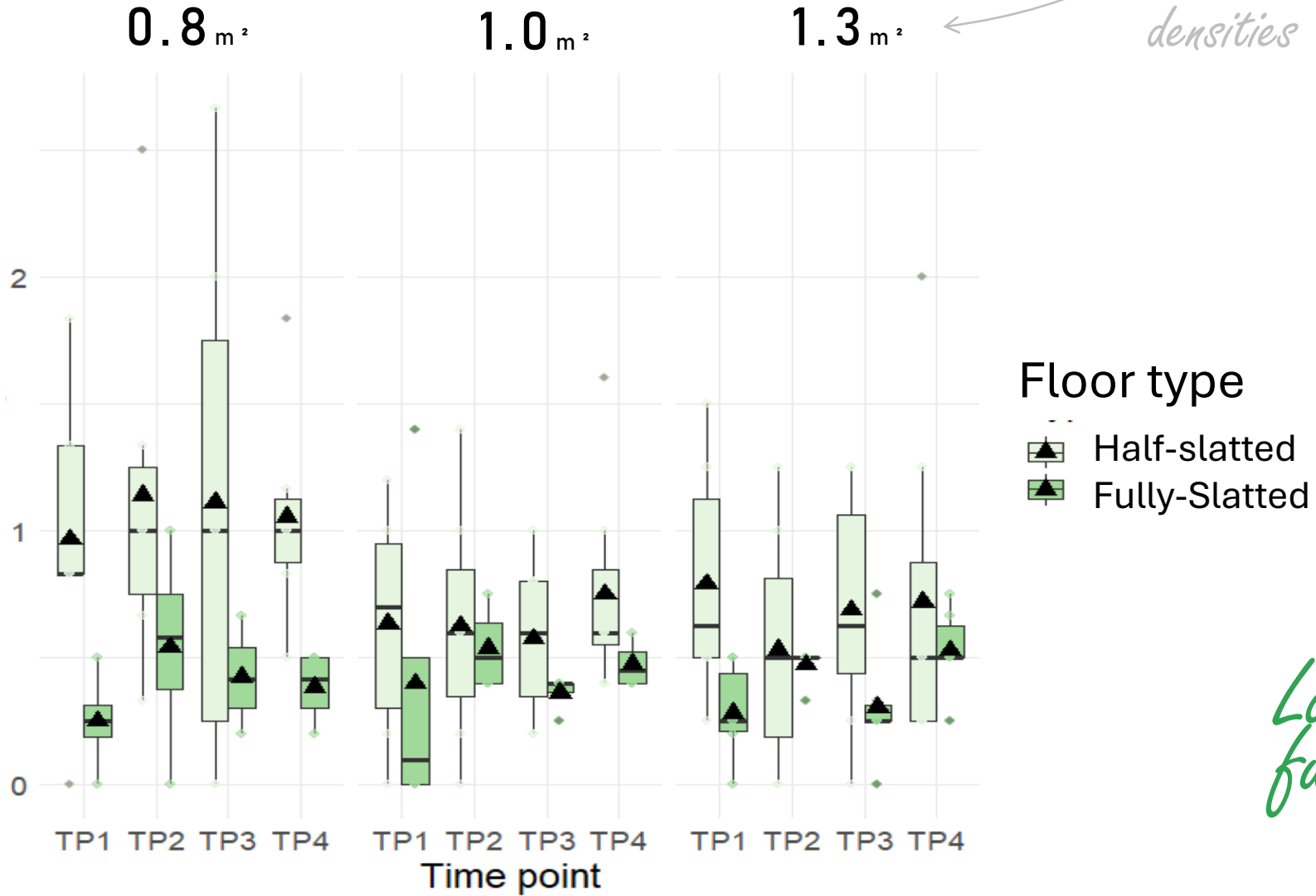
Pen soiling score



*No difference
between stocking
densities*

*Lower pen soiling score
on fully-slatted floors
at the end of fattening*

Animal soiling score



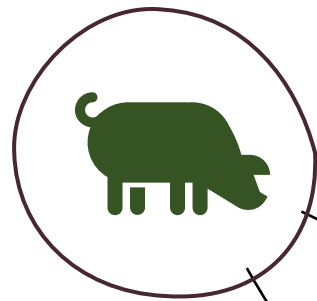
*No difference
between stocking
densities*



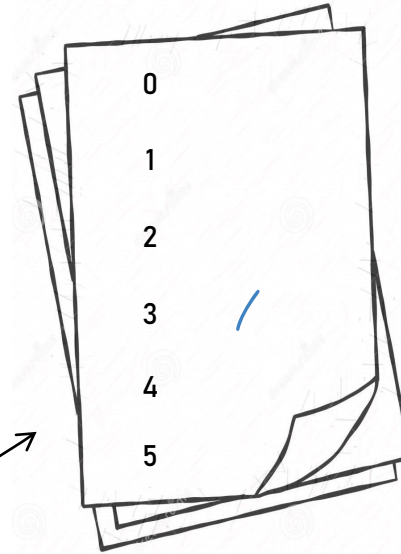
*Lower animal soiling on
fully-slatted floors*



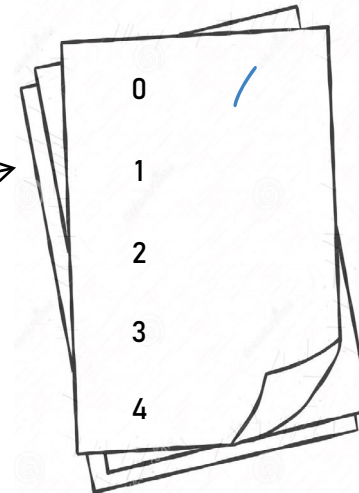
Lesions



skin



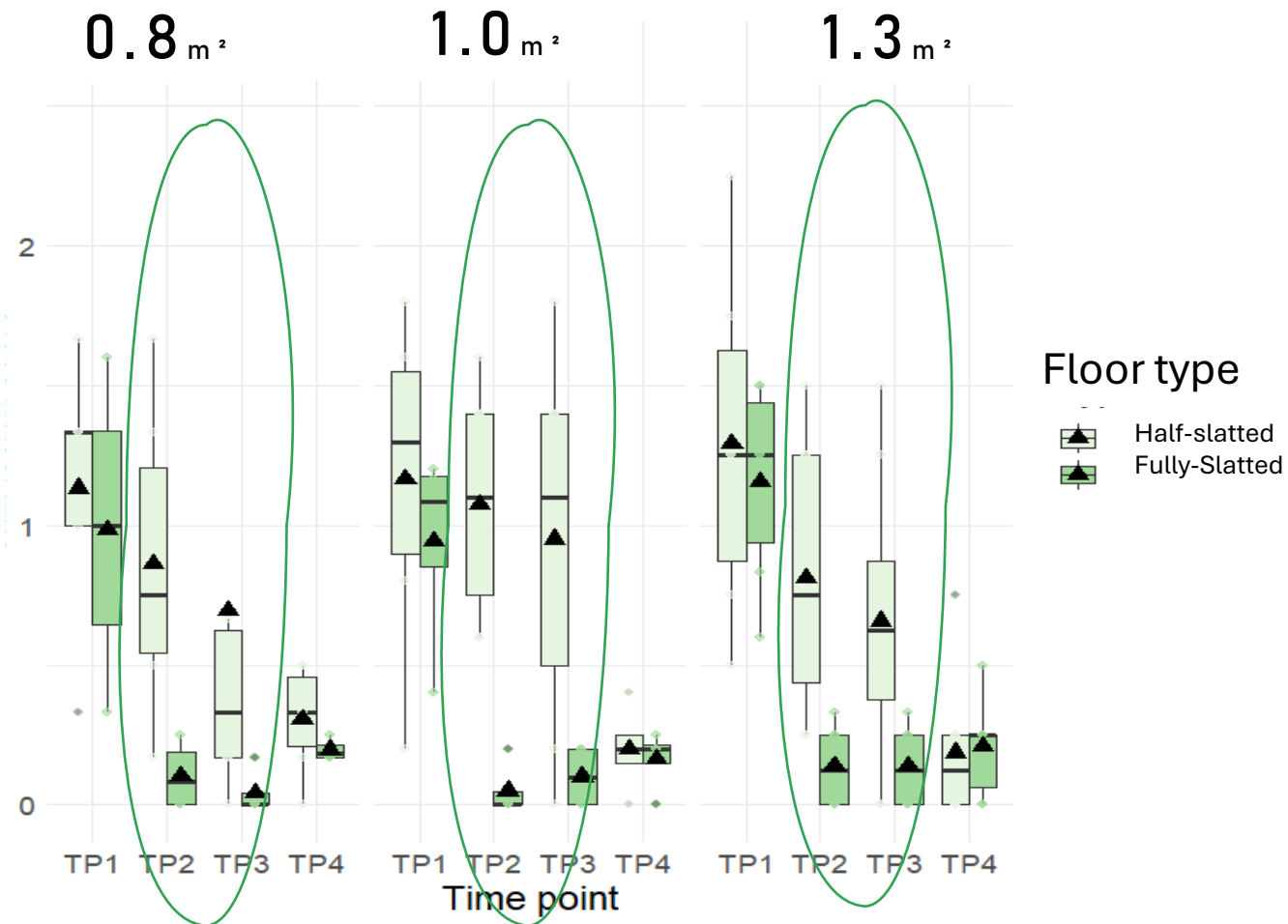
tail





Skin lesions

*lower at fully-slatted
floors at TP2 and TP3*





Skin lesions

Higher at half-slatted floors at TP2 and TP3

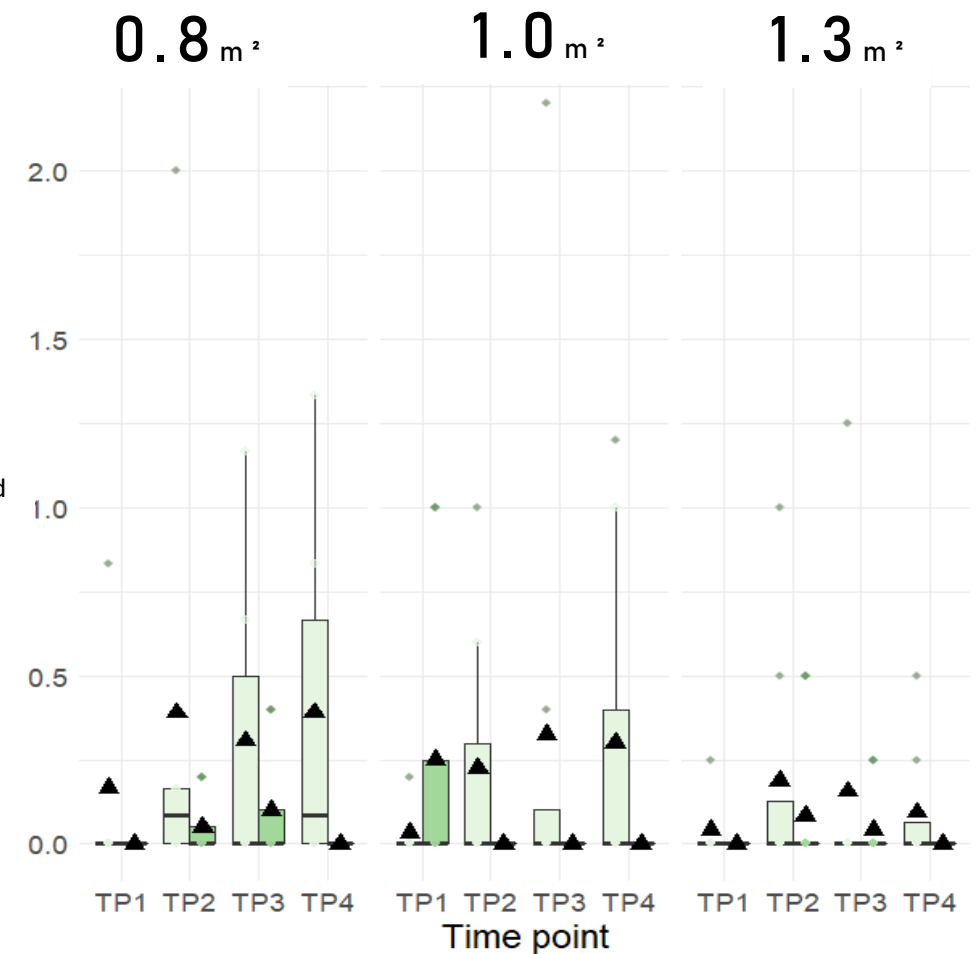


Tail lesions

Non-significant

Floor type

- Half-slatted
- Fully-Slatted





CONCLUSIONS

- : $\times \frac{1}{2} \text{æj} \text{õ} \text{á} \times \text{õyáæ} \text{Å}^3 \text{ß}^1 \text{Û} \text{õ} \text{Å}^3 \text{fi} \text{ff}^1 \text{õ}^1 \text{2}$
 $\text{Ûáý} \text{õ} \text{Å}^3 \text{Û} \text{Å}^3 \text{æ} \text{Û} \text{ý} \text{4} \text{CE} \text{ý} \text{W}$
- : $\times \frac{1}{2} \text{æj} \text{á} \times \times \text{Ç} \text{á} \text{ó} \text{ýfi} \text{1} \text{2} \text{á} \text{Û} \text{õ} \text{á} \text{Å}^3 \text{Û}^3 \text{·} \text{Û} \text{ß}$
 $\text{õ} \text{Ì} \text{Å}^3 \text{Û} \text{õ} \text{Å}^3 \text{Û} \text{õ}$
- $\text{Û} \text{ý}^1 \text{õ}^1 \text{õ} \text{ý} \text{Å}^3 \text{ý} \text{á} \times \text{H} \text{ó} \text{ý} \text{Ä}^1 \text{ó} \text{Å}^3 \text{ff}^1 \text{õ} \text{ý} \text{Å}^3 \text{·} \text{ý}^1 \text{2}$
 $\text{ý} \text{Ä}^1 \text{2} \text{Å}^3 \text{ý}^1 \text{ó} \text{æ} \text{ý} \text{Å}^3 \text{Û} \text{CE} \text{ý} \text{ff}^1 \text{1} \text{2} \text{Û} \text{õyáæ} \text{Å}^3$
 $\text{ß}^1 \text{Û} \text{õ} \text{Å}^3 \text{fi} \text{·} \text{Û} \text{ß} \times \text{Ç} \text{á} \text{ó} \text{ýfi} \text{1} \text{2}$



Effect of stocking density on performance, lesions and soiling

Thank you for your attention

Marijke.aluwe@ilvo.vlaanderen.be