How to score diarrhoea in piglets?

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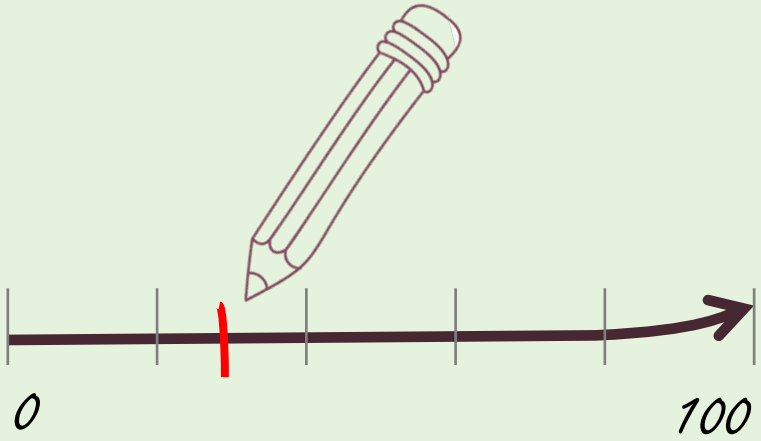


Pedersen et al. 2011

Eriksen et al. 2024

0

very solid

20

normal, solid, dry

40

moderately solid, soft with shape

60

mild diarrhea, yoghurt-like

80

watery diarrhea, sometimes yellow

100

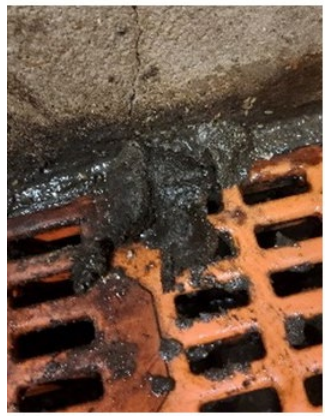
severe-watery diarrhea





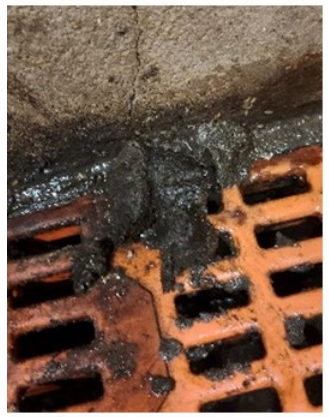




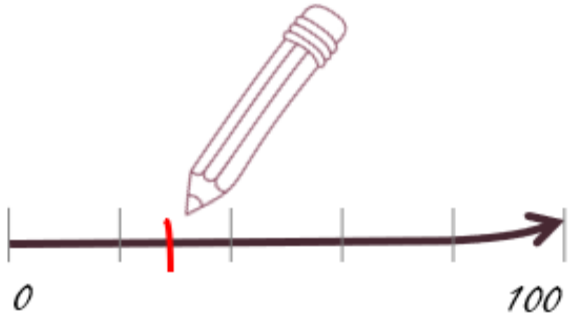
moderately solid,
soft with shape

mild diarrhea
yoghurt-like



moderately solid,
soft with shape

mild diarrhea
yoghurt-like

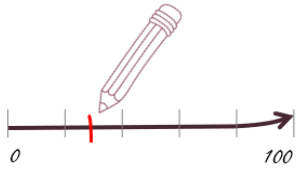
1)  vs. 

2) the reliability of scoring at pen versus at animal level

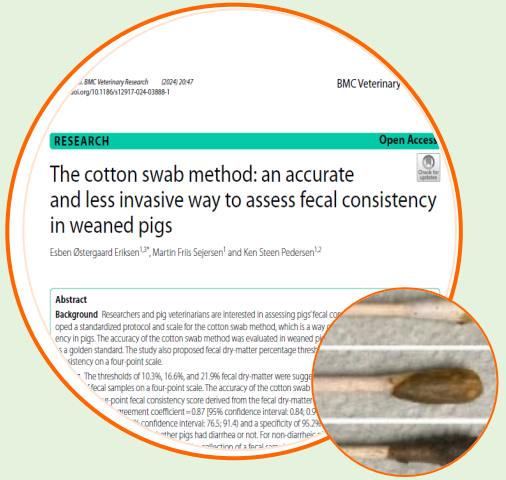
3) variation in scoring between observers

1

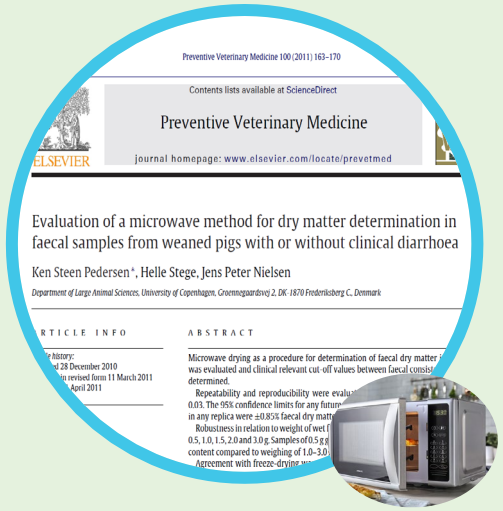
vs.



n=118

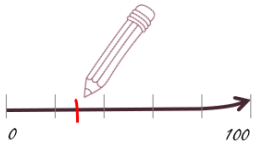


Eriksen et al., 2024



Pedersen et al., 2011

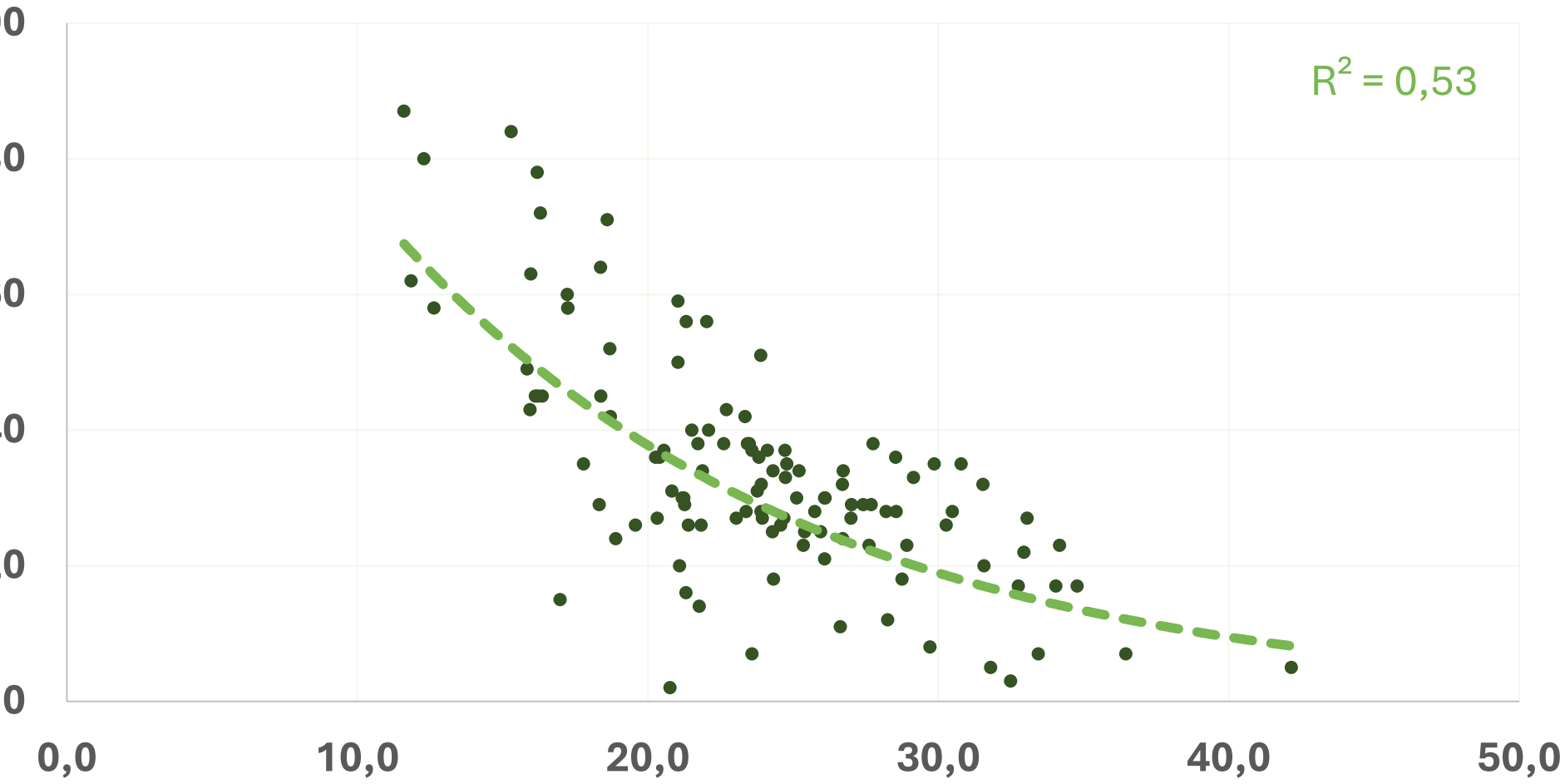
1



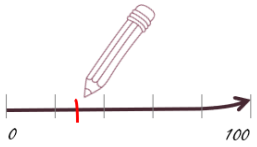
Score

Severe watery diarrhea

very solid



1



Score

Pedersen et al., 2011

Eriksen et al., 2024

R^2 = 0,53

Severe watery diarrhea

very solid

100
80
60
40
20
0

0,0
10,0
20,0
30,0
40,0
50,0

≤10.3
Watery

≤16.6
Loose

≤21.9
Soft&shaped

>21.9
Firm

≤11.3

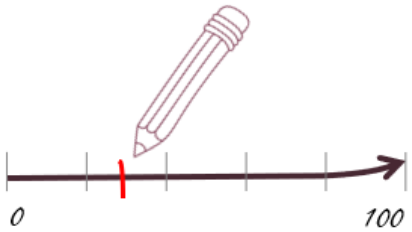
≤18.0

≤19.5

>19.5

Dry mattercontent (%)

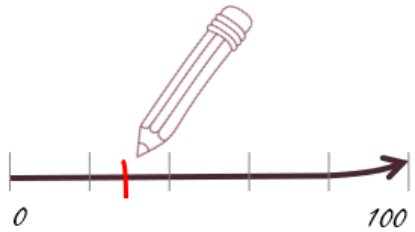
2

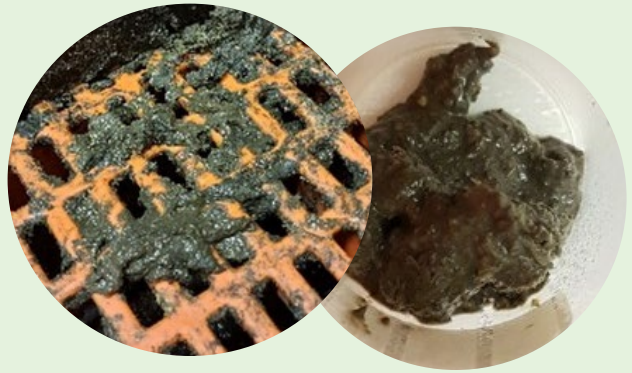


The reliability of scoring at pen versus at animal level

2

The reliability of scoring at pen versus at animal level





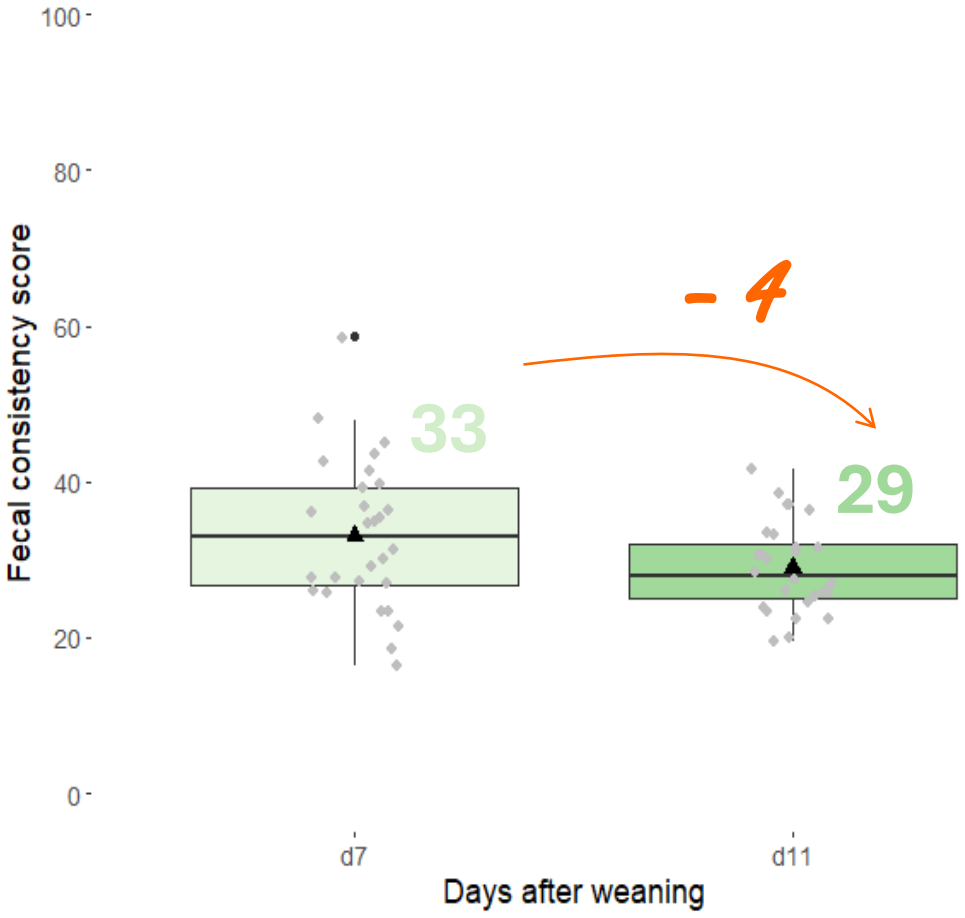
- ✓ 28 pens
- ✓ 5 piglets / pen

- ✓ d7
- ✓ d11

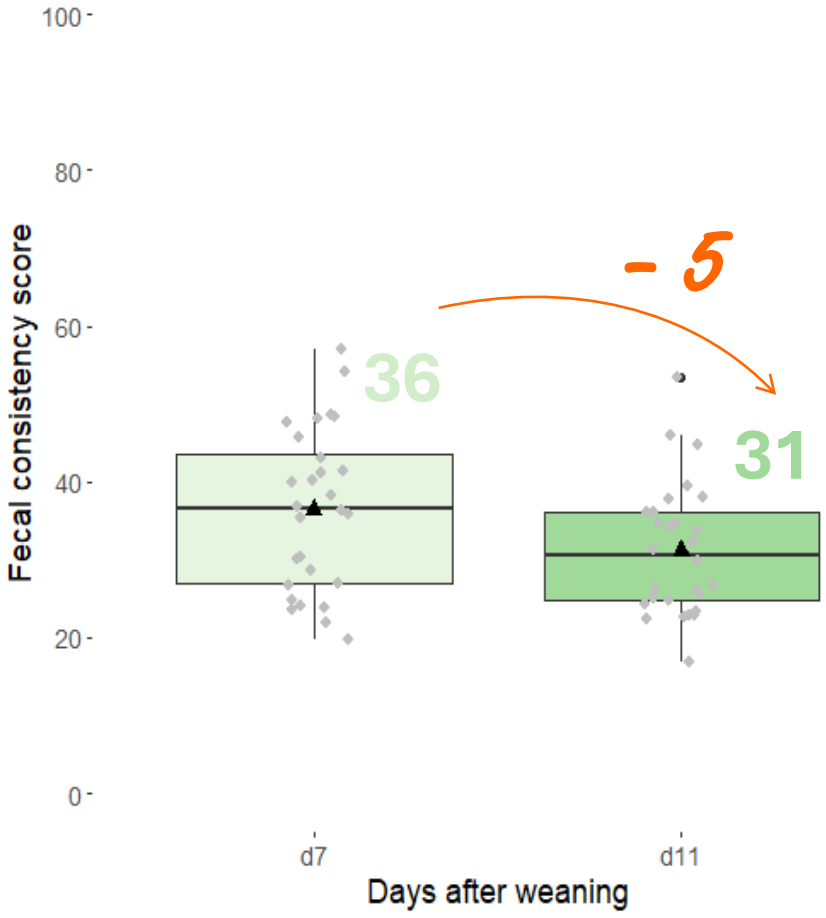
- ✓ 5 observers

MEAN SCORE

PEN



PIGLET



BY AT LEAST 1 OBSERVER

PEN

PIGLET

FCS > 60

	d7	d11	d7	d11
PEN	8	3		
PIGLETS			23	11

BY AT LEAST 1 OBSERVER

PEN

PIGLET

FCS > 60

	d7	d11	d7	d11
PEN	8			
PIGLETS			23	

14 pens

7 pens with 1 piglet

5 pens with 2 piglets

2 pens with 3 piglets

pens missed based on pen score

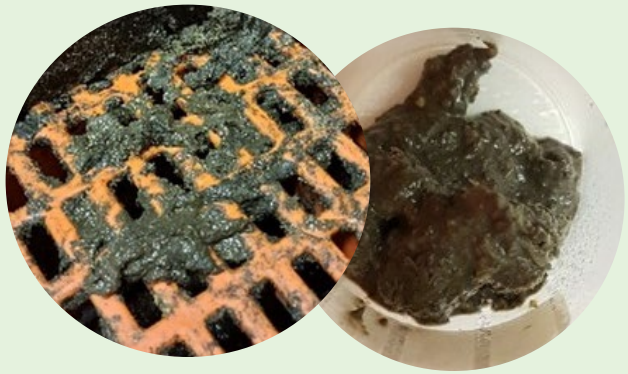
2

3

1

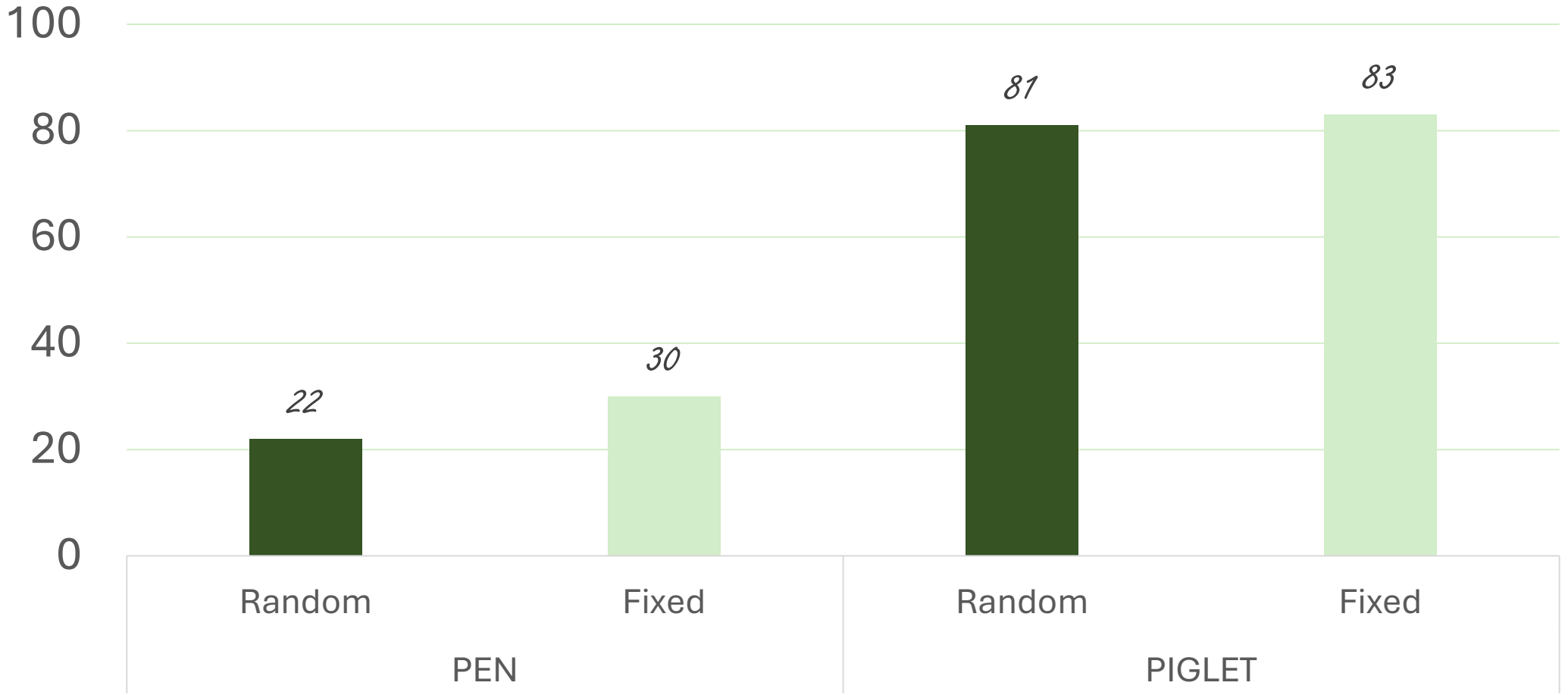
3

Variation in scoring between observers

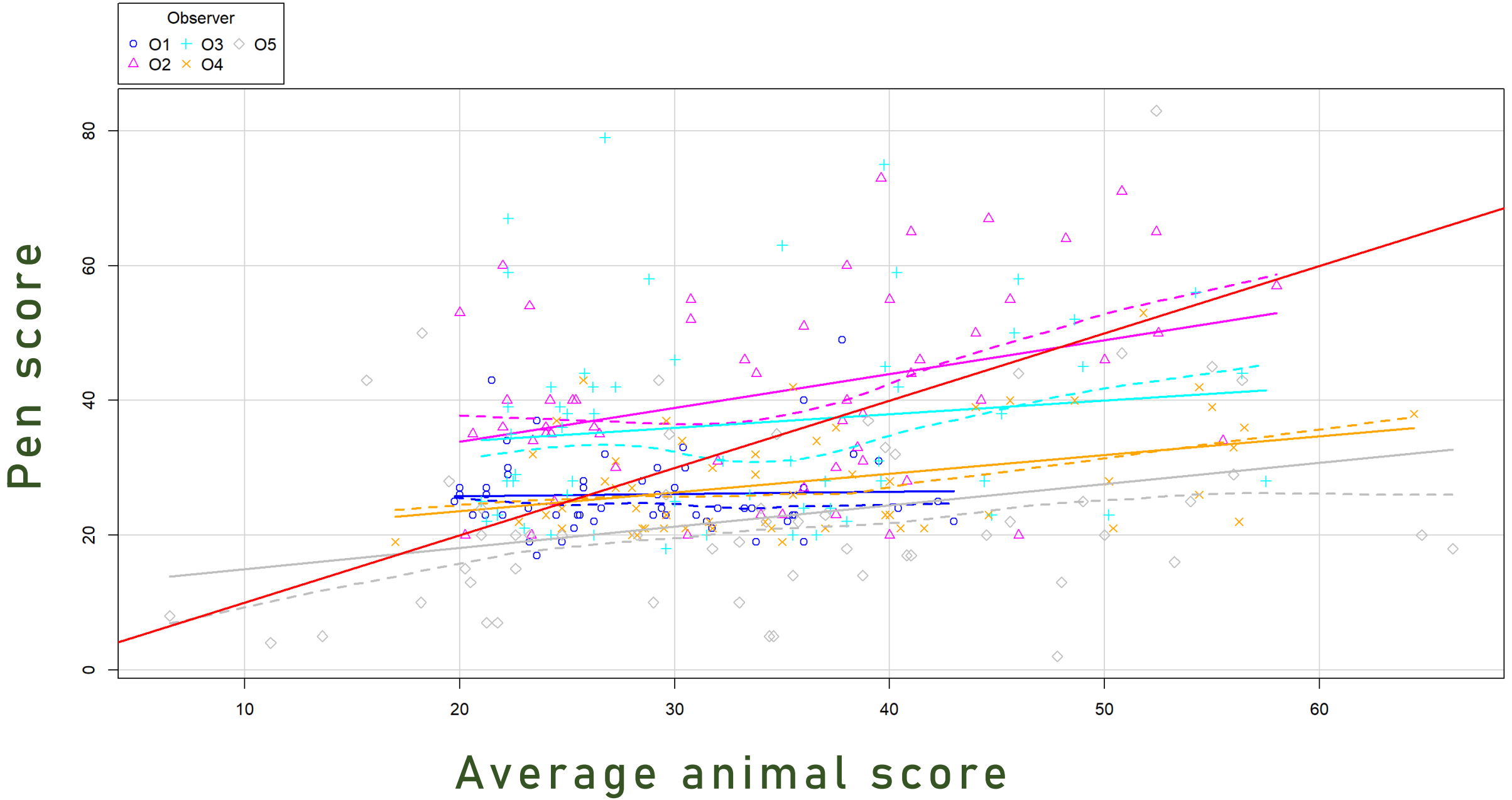


Intraclass correlation coefficient (%)

INTRACLASS CORRELATION COEFFICIENT (%)



3


Observer
O1
O2
O3
O4
O5
Pen score
Average animal score
0
20
40
60
80
10
20
30
40
50
60

CONCLUSIONS

1) Good relationship between FCS at piglet level and dry matter content

2) Poor relationship between pen and piglet level

3) The reliability of scoring at animal level is much higher – pen level more observer dependent

ILVO

How to score diarrhoea in piglets?

Thank you for your attention

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Score	1	2	3	4
Description	Firm	Soft and shaped	Loose (diarrhea)	Watery (diarrhea)
Picture				
Assessment	Sometimes, (almost) no material is deposited. Sometimes, firm and sticky feces, which may be in large quantities.	Fecal material is always deposited. A smooth/thin layer of soft feces, which are often of lighter coloration than score 1.	All of the cotton is colored with feces. The surface appears dull (less shiny than score 4). The cotton tip takes up lots of moisture.	No or only a small amount of solid material appears on the swab. The feces appear watery with a shiny surface. The stick is moist.