



## Comparing animal welfare assessments by researchers and free-range pig farmers with the PIGLOW app

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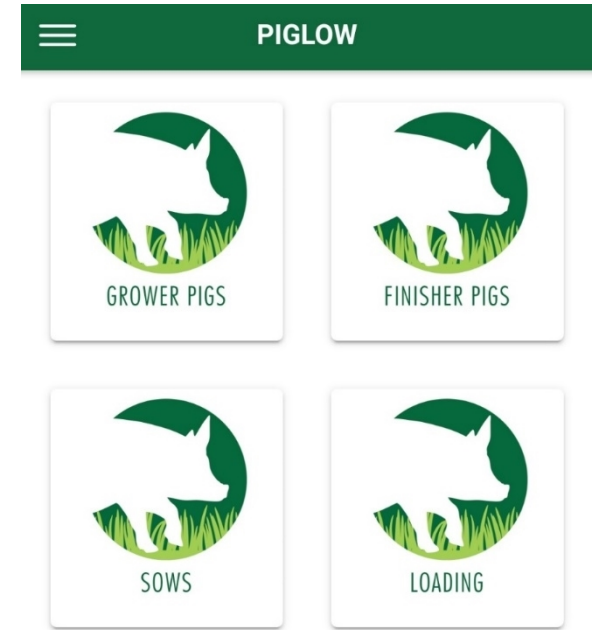
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# PIGLOW app

- PIGLOW app for animal welfare assessments by farmers
- Specific for free-range and organic farms
- Meant to sensitize farmers towards possible welfare issues
- Available in the Google Play Store and App Store in 9 languages



# Longitudinal study

- Two-year study on the effect of the app on animal welfare
- 12 participating farmers in Belgium and The Netherlands
- Participants conduct periodical animal welfare assessments for finishing pigs (at least 6)
- Farm visits at the beginning and end of the study
- Farmers and researchers conduct the first and last welfare assessments simultaneously
- Goal: to compare welfare assessments by farmers and researchers at the beginning and end of the study



## Individual level (13)

Scratches

Skin wounds

Ear lesions

Tail lesions

Lameness

Skin irritation

Too small

Bad general state

Laboured breathing

Covered in dirt

Panting

Shivering

Enrichment use

## Results – Farm visit 1: farmers vs researchers

Indicator (individual level)	Mean absolute difference   % farmer - % researcher	Number of different scores	Higher score
Enrichment use	21,22	11	7 Farmer - 4 Researcher
Scratches	6,48	8	1F 7R
Too small	2,44	6	4F 2R
Covered in dirt	2,25	5	3F 2R
Skin wounds	1,70	5	3F 2R
Lameness	1,30	3	1F 2R
Tail lesions	1,26	4	1F 3R
Laboured breathing	0,93	3	1F 2R
Ear lesions	0,53	3	1F 2R
Bad general state	0,43	2	2R
Panting	0,39	2	2R
Skin irritation	0,2	1	1R
Shivering	0,15	1	1F

More severe score: 20F - 34R

n = 12 <sup>5</sup>

## Results – Farm visit 1 vs farm visit 2

Differences in 12 individual welfare indicators – Farm visit 1 vs 2	Farm visit 1	Farm visit 2
Average mean absolute difference	1,51	0,89
Average number of different scores	3,58	2,83
Number of indicators with largest difference in this round	7	5

Difference in average scores for 12 welfare indicators – Farm visit 1 vs 2	Farmers	Researchers
Average score farm visit 1	0,92	1,48
Average score farm visit 2	0,96	0,96
Difference between farm visit 1 and 2	-0,04	0,52

Farmers gave a slightly higher (more severe) score during farm visit 2  
Researchers gave a lower (less severe) score during farm visit 2

## Conclusion

- Overall, farmers assessed the welfare of their pigs a bit more positively than researchers during farm visit 1
- Differences between researchers and farmers during farm visit 1 show that:
  - Some welfare indicators are less suitable for quick observations
  - Certain welfare indicators require more focus and/or skills to be assessed reliably
  - Farmers might be more strict when observing welfare indicators that also have economic value
- Overall differences in welfare assessments of farmers and researchers were smaller at the end of the two-year study than at the beginning, but it differed per welfare indicator
- The smaller difference was mostly due to researchers scoring welfare more positively at the end of the study, while farmers only scored slightly more negatively
- This could indicate that animal welfare has improved and that farmers have learned to measure more strictly, but alternative explanations are also possible



# PPILOW PARTNERS



*Thank you for your attention*

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