# Poultry and Plg Low-input and Organic production systems' Welfare



# PIGLOW: Development and on farm testing of an app for welfare self-assessments of pigs

**CRA-W** webinar

5<sup>th</sup> of June 2024

**Evelien Graat** 





### **PIGLOW**

- Animal welfare assessments by free-range and organic farmers
- Co-created with stakeholders
- Animal based welfare indicators
- Automated feedback and benchmarking
- Meant to sensitize farmers towards possible welfare issues
- Available in Dutch, Danish, English, Finnish, French, German, Italian,
   Romanian and Norwegian







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#### **PIGLOW**



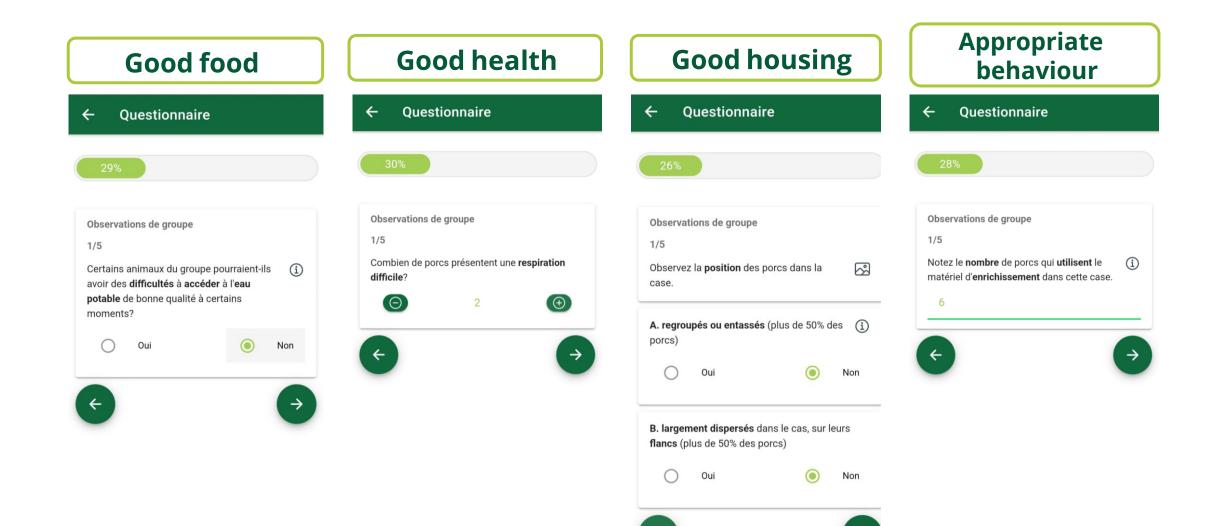








# **PIGLOW - Questions**





# **PIGLOW - Results**

	Scores	
Comportement Approprié		
Description	Réponse/Score	Analyse comparative basée sur le centile
confiance en l'homme (temps d'approcher moyen) 1	42 sec	P12
porcs qui utilisent le matériel d'enrichissement 1	30 %	P59
porcs présentant au moins 15 écorchures d'un même côté 🕦	0 %	P18 - P100
porcs présentant des lésions aux oreilles 1	0 %	P41 - P100
porcs présentant des lésions à la queue 1	0 %	P18 - P100



# **PIGLOW - Results**

		<b>Benchmarking</b>
Comportement Approprié		
Description	Réponse/Score	Analyse comparative basée sur le centile
confiance en l'homme (temps d'approcher moyen) 1	42 sec	P12
porcs qui utilisent le matériel d'enrichissement 1	30 %	P59
porcs présentant au moins 15 écorchures d'un même côté 🕦	0 %	P18 - P100
porcs présentant des lésions aux oreilles (1)	0 %	P41 - P100
porcs présentant des lésions à la queue 1	0 %	P18 - P100



### **PIGLOW - Results**

### Comportement Approprié

### Description

confiance en l'homme (temps d'approcher moyen) 1

porcs qui utilisent le matériel d'enrichissement (1)

porcs présentant au moins 15 écorchures d'un même côté 🚯

porcs présentant des lésions aux oreilles 1

porcs présentant des lésions à la queue 1

### Facteur de risque

Les lésions de la queue, qui sont habituellement causées par des morsures d'un autre porc, peuvent être douloureuses et peuvent aussi mener à des infections, qui constituent un risque pour la santé.

De plus, la présence de ces lésions indique des problèmes chez le mordeur (stress, problèmes comportementaux ou problèmes d'alimentation). Fournir des matériaux d'enrichissement aux animaux pourrait contribuer à réduire les problèmes de comportement en diminuant l'ennui. Un élément d'ordre alimentaire qui a été associé à la morsure est une carence en minéraux.

### Facteurs de risque

Stress

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- · Pas assez ou enrichissement inapproprié
- · Compétition alimentaire
- Composition de l'aliment (par exemple déséquilibre minéral)

Vous trouverez plus d'informations sur tous les indicateurs de bien-être dans le manuel disponible sur https://www.piglow.eu/Home/Questionnaires

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# **Longitudinal study**





6 farms





Period = 2 years

Assessments by farmer = 3/year

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Assessments by researcher + farmer = 1st and last

Filling out survey = **beginning and end** 

### **Research questions:**

- How do welfare assessments with the PIGLOW app by farmers compare to those of trained researchers?
- Do frequent animal welfare self-assessments with the PIGLOW app lead to an improvement of animal welfare on the farm?
- What are farmers' opinions of the PIGLOW app?



# PIGLOW in action...















# Participant survey: Opinions of pig farmers on the PIGLOW app

# Results - Farmers' opinion on the PIGLOW app

Overall, do you feel like the use of the PIGLOW app has changed how important certain aspects of animal welfare are to you? Rate on scale from 1 (not at all) to 7 (very much).

Average score: 4,00

SD: 2,00

### **Comments:**

"The assessment of lesions, scratches, etc. on the bodies of pigs has evolved positively in my opinion. I pay more attention to it." (5)

"If you assess the pigs with the app, you do look more closely" (6)

"Because we muck out the enclosures every day, we have a good image of the welfare of the animals. I don't think we treat the animals differently." (4)

"Our whole farm already revolves around obtaining the best possible animal welfare, it's our main goal." (1)



# Results - Farmers' opinion on the PIGLOW app

Overall, do you think the use of the PIGLOW app has led to an improvement of the welfare of your animals? Rate on a scale from 1 (not at all) to 7 (absolutely).

Average score: 3,82

SD: 1,60

### **Comments:**

"More reflection on pig behaviour" (5)

"It has made me look at the animals slightly differently, but we were already very focused on it" (2)

"We regularly have young people walking around here, and I find that the app has added value for them. Now they know what they should look at." (4)



# Results - Farmers' opinion on the PIGLOW app

### How would you rate the PIGLOW app on a scale from 1 tot 10?

Average score: 8,09

SD: 1,37

### **Comments:**

"I found the app very easy and user friendly. I think it is very suitable for a farmer who wants to improve welfare" (9)

"I think this app has added value for new comers in the sector. They can learn how to look at an animal, what you should pay attention to, and how to see whether an animal feels comfortable" (5)



# Results – Farmers' opinion on the PIGLOW app

### Would you recommend the PIGLOW app to other farmers?

8: yes

3: yes, if some changes are made

### What changes would you like to see made to the PIGLOW app?

"None, it's very good like this" (9)

"I would maybe give some more practical tips in the apps, or examples from real farms" (9)

"More depth and better feedback on the results, such as the Welzijnscheck Varkens" (7)

"Sometimes a little bit too precise" (9)



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# Conclusion - Farmers' opinion on the PIGLOW app

- Opinions differed, but overall, the use of the PIGLOW app had a medium-sized effect on how pig farmers look at animal welfare
- Farmers indicate that on average, they think the use of the PIGLOW app led to a small to medium improvement of the welfare of their pigs
- Overall, the farmers rated the PIGLOW app very highly, but partially because they saw the potential for others and not necessarily because they personally found it very useful
- Comments show that farmers each have different wishes and it is difficult to design something that fits everyone's needs
- Farmers indicate that they think the app could be very useful for newcomers in the sector or farmers who are not focused on animal welfare yet, so it would be good to find that audience

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