Organic pig production in mixed free-range systems: the ROAM-FREE project

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Roam-Free project

Robust animals in sustainable mixed free-range systems

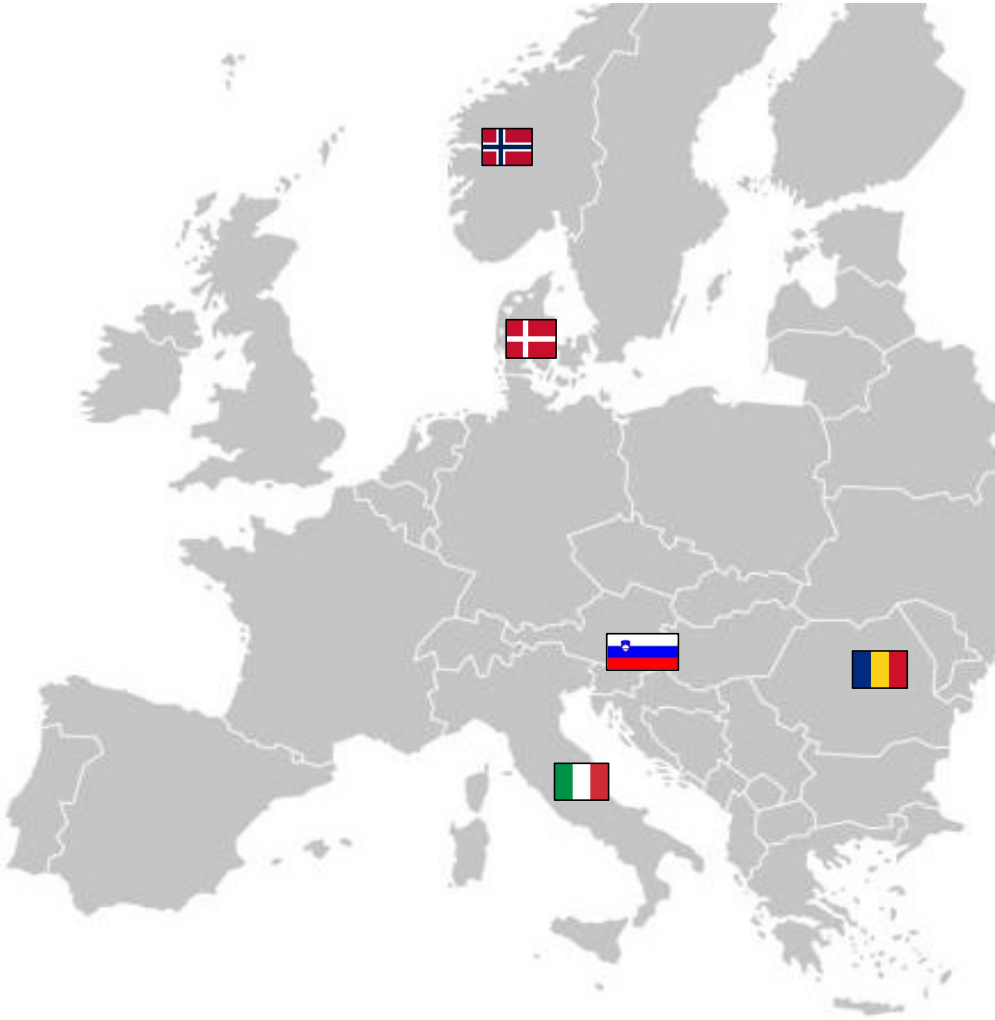
START

2021

2025

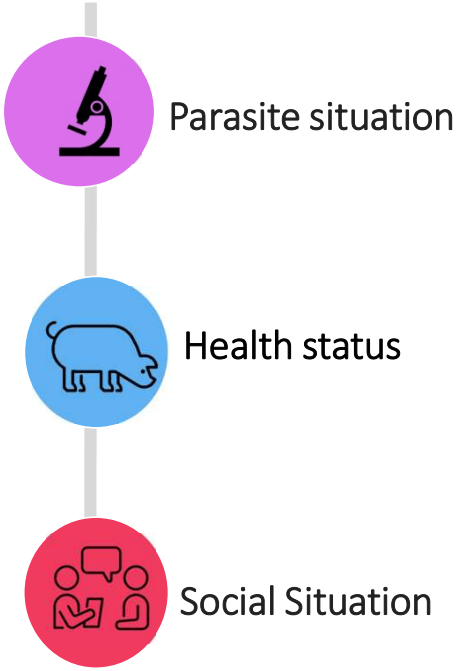
END

Introduction: Roam-Free partners



Introduction: Aim

- Give value to free-range pig farming
- Evaluating the **health status** of animals



Materials and Methods: FARMS

25
Mixed Farms

Pigs with cattle or sheep on pasture - 17

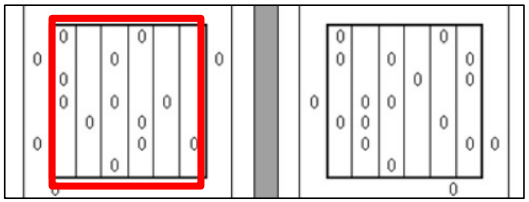
Pigs only, on pasture with 30% tree cover - 2

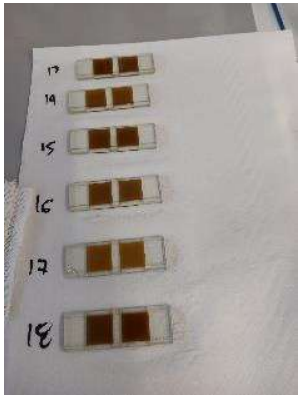
Pigs only, on pasture and arable land with cash crops - 6

Materials and Methods: PARASITIES

- Total samples: 927
- Mac Master technique
- Qualitative results

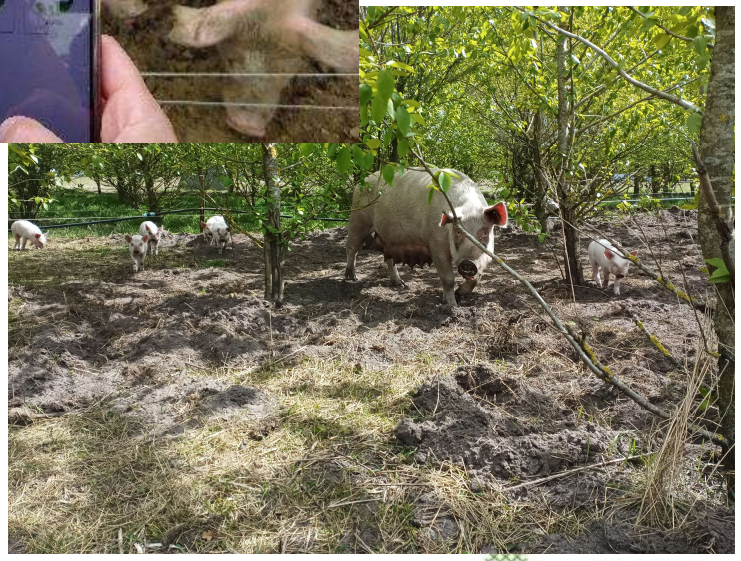
Mac Master camera





Materials and Methods: HEALTH STATUS

- Farm visit
- PIGLOW app
- Welfare assessment



Materials and Methods: SOCIAL SITUATION

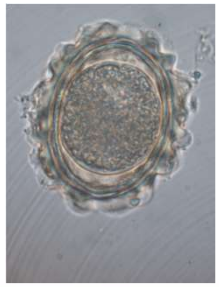
- Farm and animals
- Works
- Economic and social feedback

Results: PARASITIES in all Farms

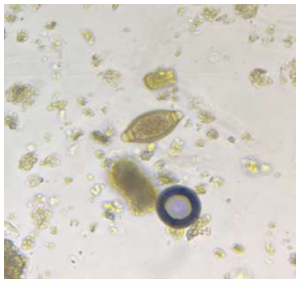
- All Farms were infected with ***Strongyloides, Ascaris suum***, and ***Trichuris suis***
- Infections from ***Strongyloides*** are particularly high in **boar and lactating sows.**
- **Lactating sows** also show a high prevalence of **Ascaris.**
- **Young piglets** show significant levels of **Trichuris.**

Strongyloides

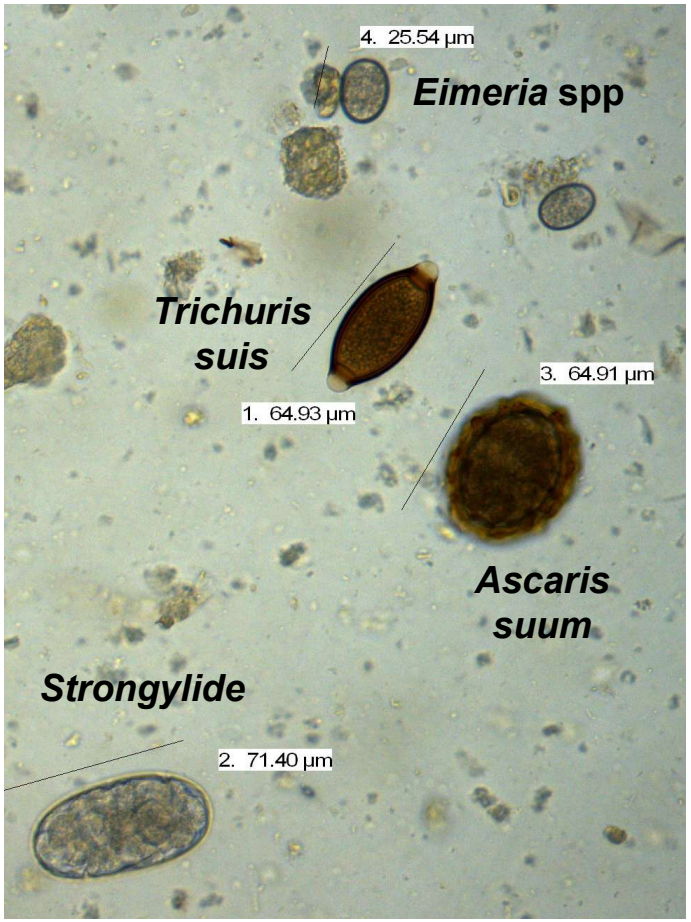
Ascaris suum

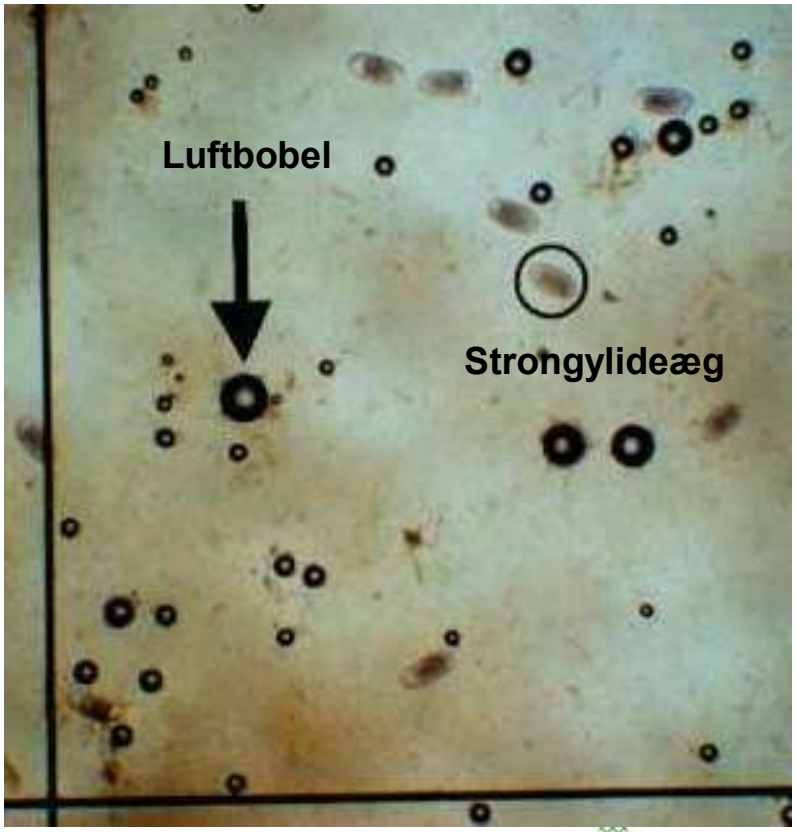


Trichuris suis

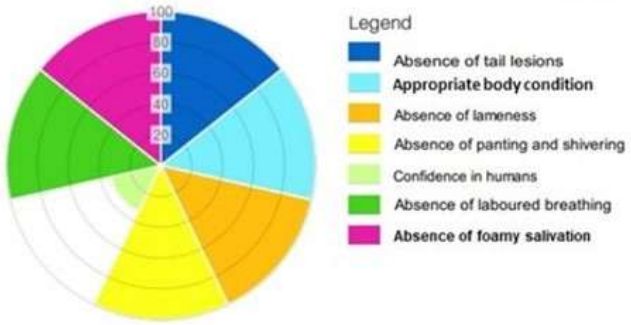


McMaster method





Results:
HEALTH STATUS
in all Farms



- ✓ Absence of tail lesions
- ✓ Appropriate body condition
- ✓ Absence of lameness
- ✓ Absence of panting and shivering
- ✓ Absence of laboured breathing
- ✓ Absence of foamy salivation
- ✓ Absence of stereotypies

Peculiarities

Confidence in humans

Burns on the skin

Results:
SOCIAL SITUATION
in all Farms

Social results

Personal well-being

Territory

Nature contact

Undervalued final product

A lot of manpower

ASF Control

Daily control of the territory

Discussion
PARASITIES

- Prevalence of *Strongyloides*, *Ascaris*, and *Trichuris*.
- Variable → **age groups** → **focused management strategies**
- Overall, these results underline the importance of **regular monitoring** and **focused management** practices to reduce the parasite load in organic farms.

Discussion
PARASITIES

The scientific literature suggests that the **prevalences of different parasites can vary widely depending on local conditions and management practices**. It is not uncommon for studies conducted in different contexts or with different methodologies to report **varied results**.

(Li, 2020 and 2022)

Yuzhi Li, Alternative and Organic Swine Production, Parasite Infection in Organic Pigs

Li, Y. Z., A. Hernandez, R. Carr, S. Major, and D. DeWitte. 2020. Parasite prevalence and fecal egg counts on organic pig farms. J. Anim. Sci. 98 (Suppl. 3): 463.

Discussion
HEALTH STATUS

- Even though the animals have parasites, they still **show good health status.**
- This shows the **robustness** of pigs raised in organic conditions and the success of the management practices.
- The **PIGLOW app confirmed that all groups of animals are healthy and behaving well**, with only a few having minor issues, like mild sunburns.

Discussion
SOCIAL SITUATION

The interviews with farmers highlighted both **positive** and **negative** aspects: while working outdoors and being close to nature improves their well-being, they also face challenges such as the high manpower demands and the low economic value placed on organic products, making it hard to maintain the economic sustainability of the farm.

Conclusion

- **Management practices**, such as regular pasture rotation, improved hygiene, parasite monitoring, and continuous observation of animal welfare, are **essential to maintaining a healthy environment.**

- **Farm management specific,** also adapting to the farmer's objectives.

THANK YOU FOR THE ATTENTION