



Mid-term Seminar

Phosphorus efficiency in Gallus gallus and Sus scrofa (PEGaSus)

Partners:

Leibniz-FBN/Dummerstorf, D; AFBI/Belfast, UK; AU/Aarhus, DK; SEI/Stockholm, S; UCSC/Piacenza, I

Problem addressed in the project:

Phosphorus (P) is an essential element with finite commercial limits. The balance of the P cycle in farming systems is crucial to achieving sustainable and resilient livestock production.

Objectives:

- Evaluation of the impact of alternative P farm management strategies using a bio-economic model
- Animal experiments to assess various feeding strategies and alternative P sources for pigs and poultry
- Technical, governance and policy strategies to minimize P overloading of soil/runoff and enrichment in aquatic systems

Interim Research Findings:

- Moderate genetic contribution on mineral homeostasis
- Bio-economic working model set up for pig and poultry farms
- Governance for sustainable P use is still lacking within EU

Future research and activities:

- Lab experiments to characterize genetic, molecular and physiological factors of efficient P utilization
- Quantification of the P reuse potential (waste streams)
- Simulation of alternative policy measures for controlling P use and runoff from farms

Opportunities and challenges:

- Effective farm practices to improve P efficiencies
- Appropriate governance and policy instruments to restrict overloading, waste and runoff

Funding:



PIGS/CHICKEN



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