

Master Thesis Opportunity

Ammonia (NH₃) and greenhouse gas (GHG) emission mitigation measures are crucial in the agriculture sector. One effective strategy is adjusting animal feed, as it addresses the root cause of emissions without requiring major changes to farm infrastructure, allowing for quick implementation.

Feeding strategies significantly affect nitrogen (N) excretion in ruminants, which in turn impacts gaseous N losses. An oversupply of crude protein (CP) in diets increases urinary N excretion, leading to higher NH₃ and GHG emissions. Studies have shown that reducing dietary CP content can lower both urinary N excretion and NH₃ emissions.

Many cattle farms, particularly in Germany, are adopting high and low-protein feeding strategies, but the emissions from these farms are not well known.

In this research, we will select 10 organic farms in Hessen, Germany (5 with high-protein diets and 5 with low-protein diets), and collect feed and slurry samples from these farms. The analysis of the diet and slurry parameters, as well as emissions measurement, will be conducted at Gladbacherhof. The data will also be compared with high and low input diets at the Gladbacherhof farm.

The sample collection will start at the end of June.

Please contact us if you are interested on this position!

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