

## CIEL Feed and Nutrition Open Innovation Group Monogastric

Tuesday 17<sup>th</sup> May 2022 - Meeting Notes

- Feed formulation costs taking a priority at present, sustainability taking a back seat
- Jane Salter confirmed that reviews of Carbon footprint tools are ongoing ADAS for Defra. All are IPCC compliant and will compare progression on farm over time.
- Feed is using the GLFI database, AIC have pulled out approx. 120 ingredients used in the UK and focused on GHG emissions (land use charge should be used unless there is robust data to suggest otherwise). This data is available but to be incorporated into ration formulation tools will incur a charge. Fertiliser inputs have been taken as the global average UK fertilizer inputs are lower.

**Project idea:** A data driven project for specifically UK crops (instead of using European proxies), optimised to UK systems and look at opportunities for improving carbon footprint.

- There is missing data on FCR when just considering the carbon footprint as the models predict from the nutrients not the raw materials

**Project idea:** For some ingredients we have confidence in animal performance (meta-analysis) other ingredients data is lacking and causing cautiousness in the industry, could there be a project to try and fill the gaps.

- Alternative proteins & former foods are limited by quantity on the market and reliable supply, they are also often expensive. EU just reintroduced PAP and insects already available.

**Project idea:** Quantify value of materials so when they become an option, we have the data.

- Former foods likely to become more available with increasing pressure on food sector to reduce waste.

**Project idea:** Mapping of feedstuff availability and likelihood of change across the UK and ease of incorporation into animal feed.

- Peas and beans were discussed supply, varieties, storage, suitability for use in animal feed. Issue during last review was supply (DEFRA, 2015 green pig project). This may change currently due to increases in fertiliser prices peas/beans/lupins become more attractive to growers because of nitrogen fixation. High cost of peas and beans can also be an issue.

**Other ongoing work:**

- Zero waste Scotland have done mapping for Scotland. Do they contract for the rest of UK?
- FSA just launched a tender to look at unpermitted substrates for insects, what is the best substrate? (note, GWP of insect meal significantly higher than other protein sources because of drying stage)
- DEFRA are conducting a project on feed additives and feed efficiency, appointed Henry Clifford (dairy roadmap) to look at efficacy of feed additives.
- Some work in Denmark looking at utilising grass (leaf protein concentrate) as a protein source for monogastrics.

Ideas for funding:

1. Alternative proteins – utilisation of home-grown crops on UK farms as a protein source; what's available/current supply, ease of incorporation into rations, digestibility. Variation in home grown crops and how does that affect animal performance. Consider gut health and meat quality/benefit to consumers here too. Alternative proteins – insects/grass the effect on the product.
2. Non-antibiotic feed additives for reducing carbon footprint.
3. Interaction model for how feeds impact animal performance, animal health, linking to CFP.
4. Mapping of feedstuff availability, former foods and waste streams – need to check this isn't already being done.
5. Circular economy project for pigs and poultry.
6. No UK data in the GFLI for many home-grown raw materials, therefore the values are probably inflated due to using European proxies.