

## CIEL – Open Innovation discussion notes 04/07/22

**Project idea from initial workshop: 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.

### **Discussion:**

#### **Relationship to the Mapping Project**

The project group felt that before identifying which raw materials could be focussed on as part of this research, the mapping of available potential alternatives must be completed first. The mapping exercise should be consider raw materials in its widest sense; and not just focus on protein or cereal replacement. Nutrients which are added to the diet in relatively small amounts should also be factored in (oils, phosphorous etc). This will avoid the team working on those raw materials which may be interesting, but are severely limited in supply. There may also be regional differences, or specific local solutions.

Once the mapping project has been completed, the team will reconvene and assess the opportunities. It is worth noting that specific opportunities may be more attractive to different partners and so some projects may be progressed outside of this main group.

#### **Target Opportunities**

Once the opportunities for development have been identified, the team will need to consider a number of factors:

- Volume/availability /seasonality
- Handleability and storage
- Processing technologies; does the material need to be processed in a particular way before it can be fed to an animal?
- Extraction technologies; are there any anti-nutritional factors that need to be considered and removed?
- Regulatory; is the material considered a waste? Is it legally allowed to be fed to animals?

It is suggested that further R&D may be needed before a viable feed is produced

#### **Viable Material**

Once a viable animal feed has been identified/produced, then trials need to be carefully considered. Trials should be conducted across breeds and species.

Outcomes of the trials should be such that animal performance (including growth parameters and processing yield), animal health and welfare metrics and environmental impact are recorded and can be compared.

Based on Trial Results – carbon footprint of meat/eggs would then need to be calculated. This should take into account the PEF of the animal feed, and animal performance data as a whole. Comparisons can then be made against the current standard.