

NOVEL AND SUSTAINABLE FEESTUFFS FOR MONOGASTRIC ANIMALS

- MUSSEL MEAL, SEAWEED MEAL AND INSECT MEAL

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WHY LOOK FOR NOVEL FEEDSTUFFS?

Population growth



How do we fulfill the increased Demand for protein rich feedstuffs?

MORE?

Ca. 70% CP



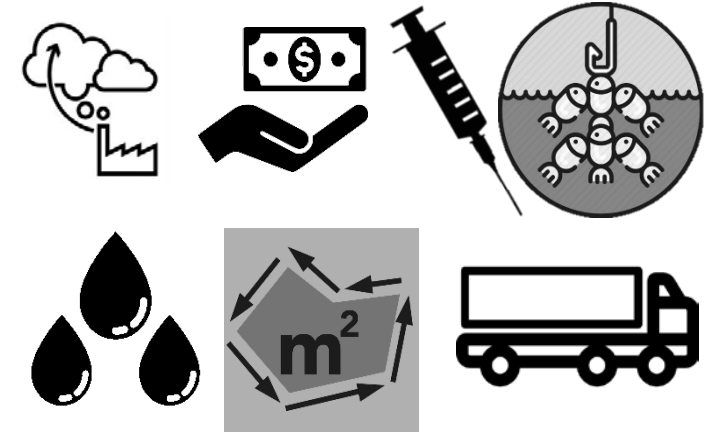
Fishmeal

Ca. 40-50% CP



Soybean meal

Sustainability



Bonus

2025 = Organic livestock fed with only organic agricultural protein

WHAT SHOULD A NOVEL FEEDSTUFF BE?

Growth performance

The novel feedstuff should:

- Give equal or better gain to fishmeal or soybean meal
 - Be (highly) palatable
 - Give equal or better feed conversion ratio to SBM/FM (kg feed/kg gain)
- Nutrient composition is important!

Is there any added value?

- Improved gut health?
 - Improved product quality, i.e. egg quality
- Functional nutrients

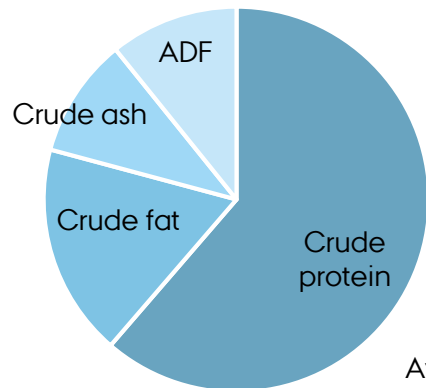
ALTERNATIVES FOR MONOGASTRICS

Insect meal

- No problem acceptance by animals
- Efficient converter of nutrients!
- Low land area needed
- Not area specific

Possible effect gut health?

- Chitin, bioactive peptides



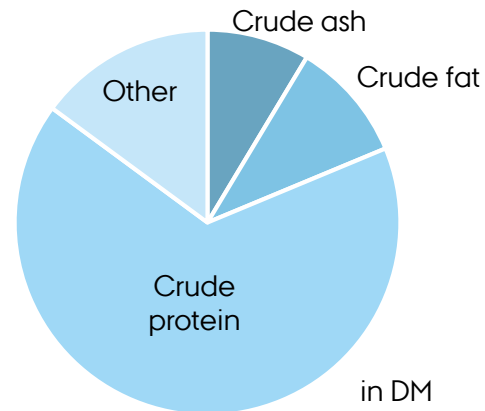
Avg. BSF+ YMW in DM

Blue Mussel meal

- No competition human
- Mitigation excess nutrients
- Water (=no land area needed)
- No external inputs
- Grown in Denmark (most N-Europe)

Possible effect egg quality?

- Carotenoids+omega-3



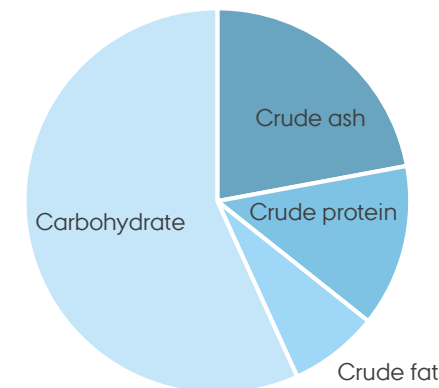
in DM

Seaweed meal

- Some mitigation excess nutrients
- Water (=no land area needed)
- No external inputs
- Grown in Denmark (most N-Europe)

Possible effect gut health?

- NSP, minerals, PUFA, vitamins



Average green+ brown in DM



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