

# Refined forage legumes as local sources of protein feed for monogastrics and high quality fibre feed for ruminants in organic production



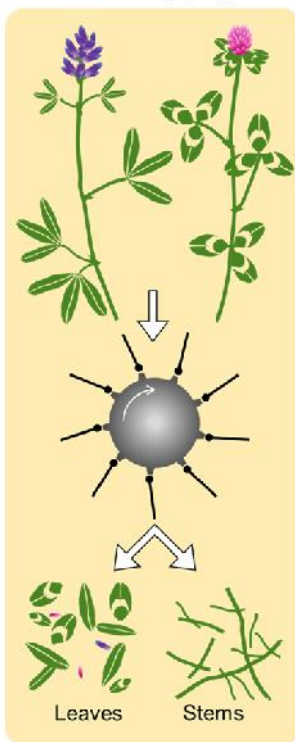
Steffen Adler - steffen.adler@nibio.no

## Challenges addressed by the project

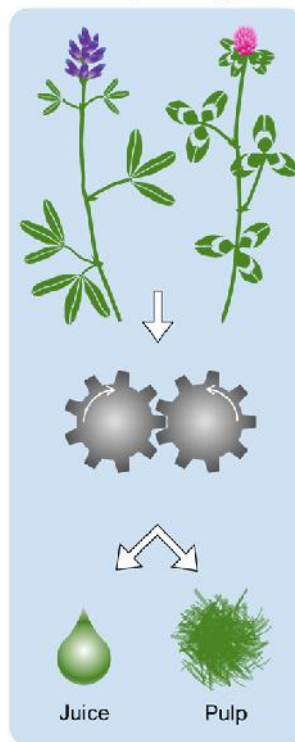
- Lack of local protein feed for monogastrics in organic farming
- Protein-rich fractions of forage legumes are difficult to preserve
- Little knowledge about feed value of fractionated forage legumes
- Introducing local food systems requires knowledge about the actors attitudes, motivations and ability to deal with risk management
- Food systems must be economically, socially and environmentally sustainable



### Leaf stripping



### Juice pressing



## Main activities

- Predicting protein supply from forage legumes
- Fractionation of lucerne and red clover in field trials
- Feeding trials with pigs and sheep
- Developing concepts of production systems based on local feed production
- Interviews with farmers and stakeholders
- Sustainability assessment
- Disseminate results

## Expected results and benefits for end-users

### New knowledge

- Yields, protein content and fibre digestibility of lucerne and red clover under different climatic conditions
- Fractionation, preservation and feed value
- Novel concepts of local food systems
- Farmers' and other actors' attitudes towards cooperation and self-sufficiency

### Implication

- More production of forage legumes
- Fractionation and preservation of forage legumes as feed for monogastrics and ruminants becomes viable
- Increased self-sufficiency with feed
- More sustainable animal production in organic farming