## Organic production and consumption in Norway - new knowledge through research and dissemination



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Research are needed to reach the official goal of 15 % organic food production and consumption by 2020. Annually, ca 40 mill NOK is used on research in organic farming. There are no spesific research program for organic agriculture in Norway, and no spesific body coordinates research priorities and proposals relevant for the sector. Priority are given to topics relevant for both organic and conventional farming. Bioforsk are active in both research and dissemination of organic production and consumption.

## **Nutrient management**

- A key to ecolocical intensification of farming systems and sustainable farming
- Anaerobic digestion of organic matter gives useful fertilizer
- Efficient utilization of nutrients is essential to reduce emissions of greenhouse gasses from agriculture

# rrom agriculture



In SoilEffects we study the effects of anaerobically digested slurry as a fertilizer: yields, soil properties and soil biota.

## Grassland management and ruminant production

- The role of cultivated grassland and rangeland as a local feed resource for carbon sequestration
- Effect of forages on contents of fatty acids and vitamins in milk and meat.
- Tick borne diseases are an increasing challenge in grazing systems



In the projects OptGraze and BeiteRessurs we focus on optimal grazing strategies for dairy cattle and maintenance of local grazing resources.

### Animal welfare

- An important ethical attribute for organic food, but still animal welfare problems are common in organic farming
- Focus on herds in automatic milking systems:
  Grazing possibilities and cow/calf relationship
- Gene-environment interactions: A key topic for future research



Animal welfare is an important attribute in organic production. Research within ethology, genetics and health is necessary to improve welfare.



In EnviroMilk we analyse nutrient circulation on farm level, nutrient budgets and energy use on 20 organic and conventional dairy farms.



In several projects we have monitored soil-borne greenhouse gases ( $N_2$ 0 and CH<sub>2</sub>) from organic and non-organically managed grassland.



In FORUT we study grassland management, forage quality and milk production.



In TICKLESS we focus on reducing tick density and tick-borne diseases in order to secure welfare and health of grazing sheep.

#### Dissemination

• An important part of the work



www.Agropub.no provides knowledge to farmers and other target groups.



School class at work in the demonstration garden at Tingvoll farm.