Organic dairy crop rotations

Crop rotations	In-field:	Outfield:	Perm. pasture
	Barley	Barley	
	Grass-clover	Grass-clover	
	Grass-clover	Grass-clover	
	Grass-clover	Wholecrop	
	Grass-clover	Oats	
	Wholecrop	Barley/pea	

Pasture mixes

Basic (per. ryegrass, white and red clover)
Basic + 8 forbs (plantain, lucerne, birdsfood trefoil, caraway, chicory, salad burnet, yarrow, sainfoin)

Pasture management			
	1 Cut	0	total-N cattle slurry
	2 Cut	50	-
	3 Cut	100	-
	4 Cut	200	-
	5 Cut	300	-

Focus on infrastructure: Organic Dairy crop rotations

AARHUS UNIVERSITY SCIENCE AND TECHNOLOGY

EVALUATION OF DEPT OF AGROECOLOGY
27 MAY 2019

Organic dairy crop rotations

Activities

- Production, N-utilisation and leaching
- Multispecies mixtures: Composition and quality, N-transfer between species, micronutrients
- Sources for DON-leaching
- Soil clover fatigue
- Macropores, earthworms and leaching
- Systems analysis and economic modeling
- N_2O emissions from grassland/grassland cultivation
- Sensor techniques in grass-clover
- Guests

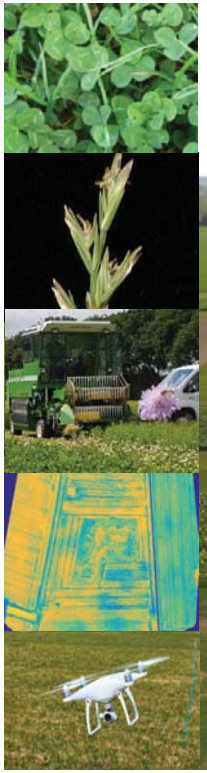
Organic dairy crop rotations

Established 1987

Research platform for plant production on dairy farms

Jørgen Eriksen

AARHUS UNIVERSITY - Department of Agroecology

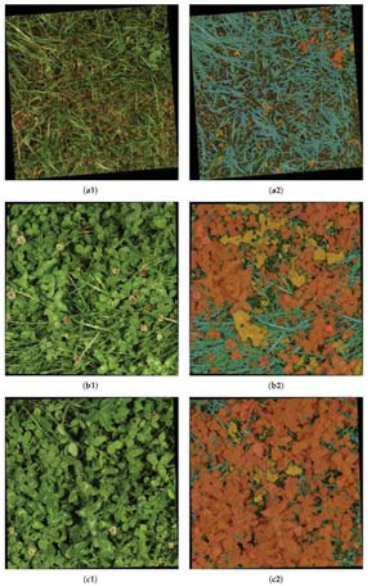


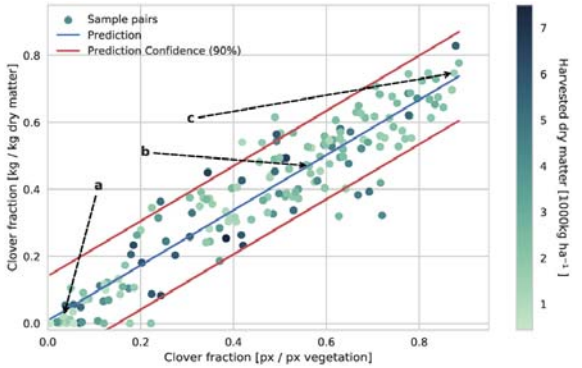
Innovation Fund Denmark
RESEARCH, TECHNOLOGY & GROWTH

SmartGrass 2017-2020

AU Agroecology
AU Engineering
Agrointelli
Seges
DLF
DSV
I-GIS
G. Lassen
C.E. Sørensen

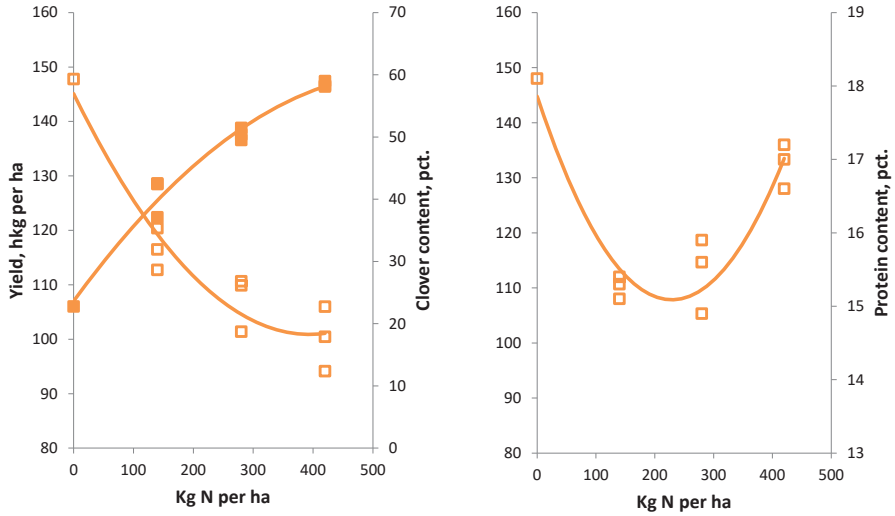
Estimating botanical composition





sensors
MDPI
Sensors 2017, 17, 2930; doi:10.3390/s17122930
Article
Estimation of the Botanical Composition of Clover-Grass Leys from RGB Images Using Data Simulation and Fully Convolutional Neural Networks
Soren Skovsen [1,*], Mads Dyrmann [1], Anders Krogh Mortensen [2], Kim Arild Steen [3], Ole Green [3], Jorgen Eriksen [4], René Gislum [2], Rasmus Nyholm Jorgensen [1] and Henrik Karstoft [1]

The challenge of grass-clover fertilization

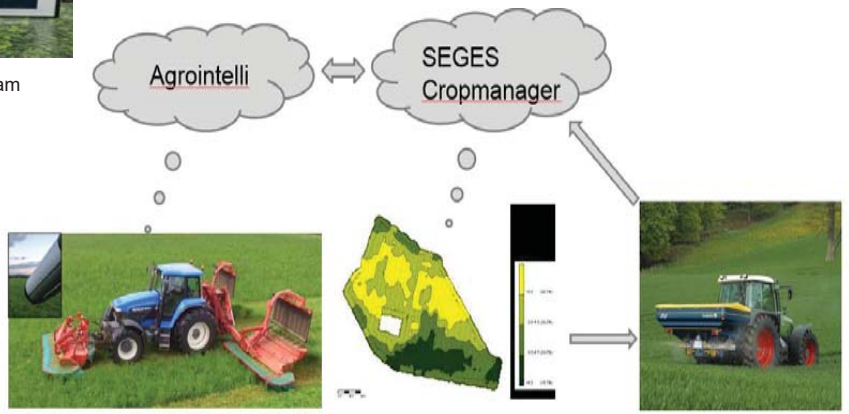


MultiPlant

Multi-species grasslands for protein, bioenergy and biodiversity

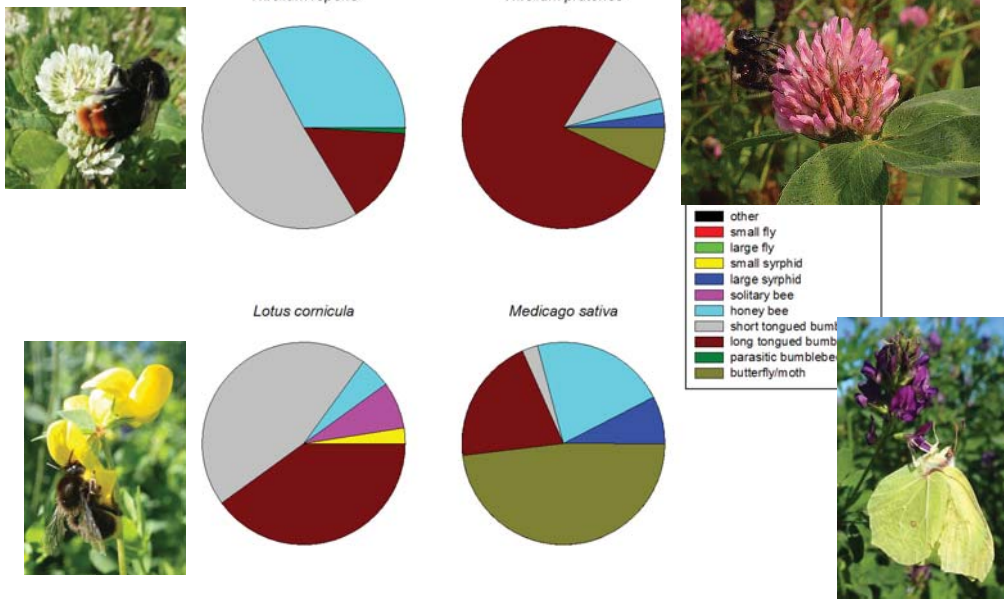
Fertilizing grass-clover mixtures from botanical composition

The Clovercam

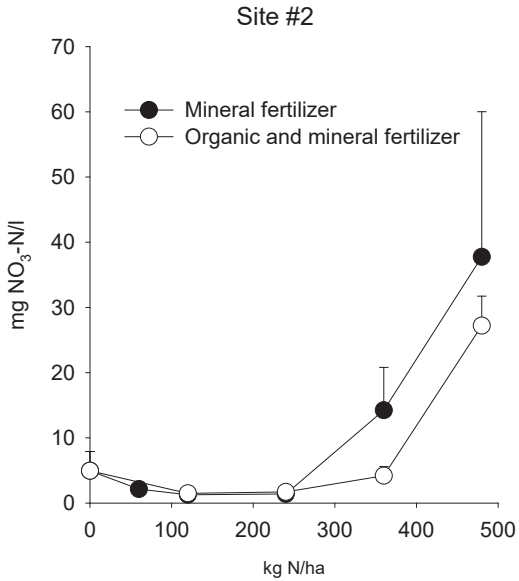


Innovation Fund Denmark
RESEARCH, TECHNOLOGY & GROWTH

Pollinator profile: Legumes



Nitrate leaching from grass-clover mixtures



Pollinator profile: Herbs