

Produktion af grønne biomasser til bioraffinering



Jørgen Eriksen

Yoko Dupont, Wenfeng Cong, Nawa Raj Dhamala, Jim Rasmussen, Karen Søegaard
Aarhus Universitet

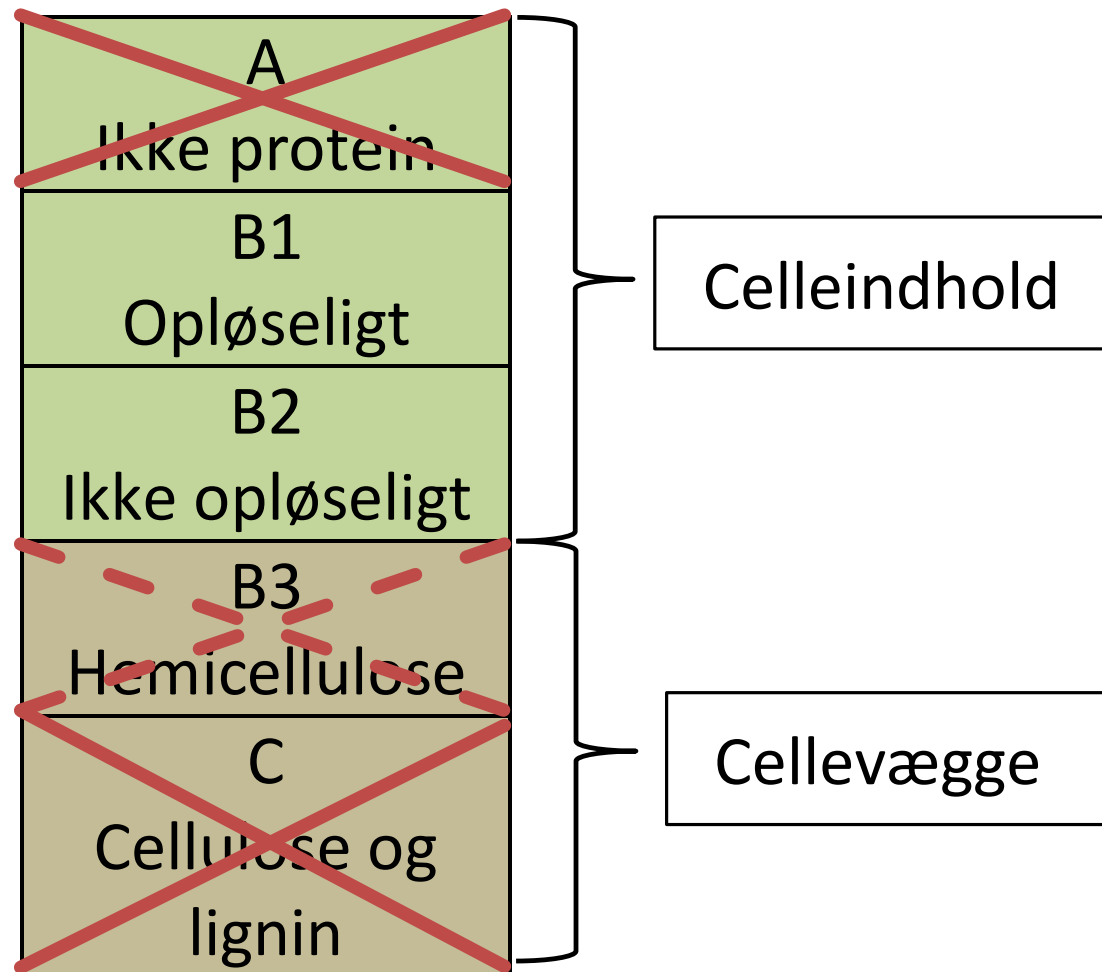


Indhold

- Kvælstof i planter
- Proteinudbytter
- Ensilering
- Jordens frugtbarhed og biodiversitet
- Nitratudvaskning
- Proteinproduktion i praksis

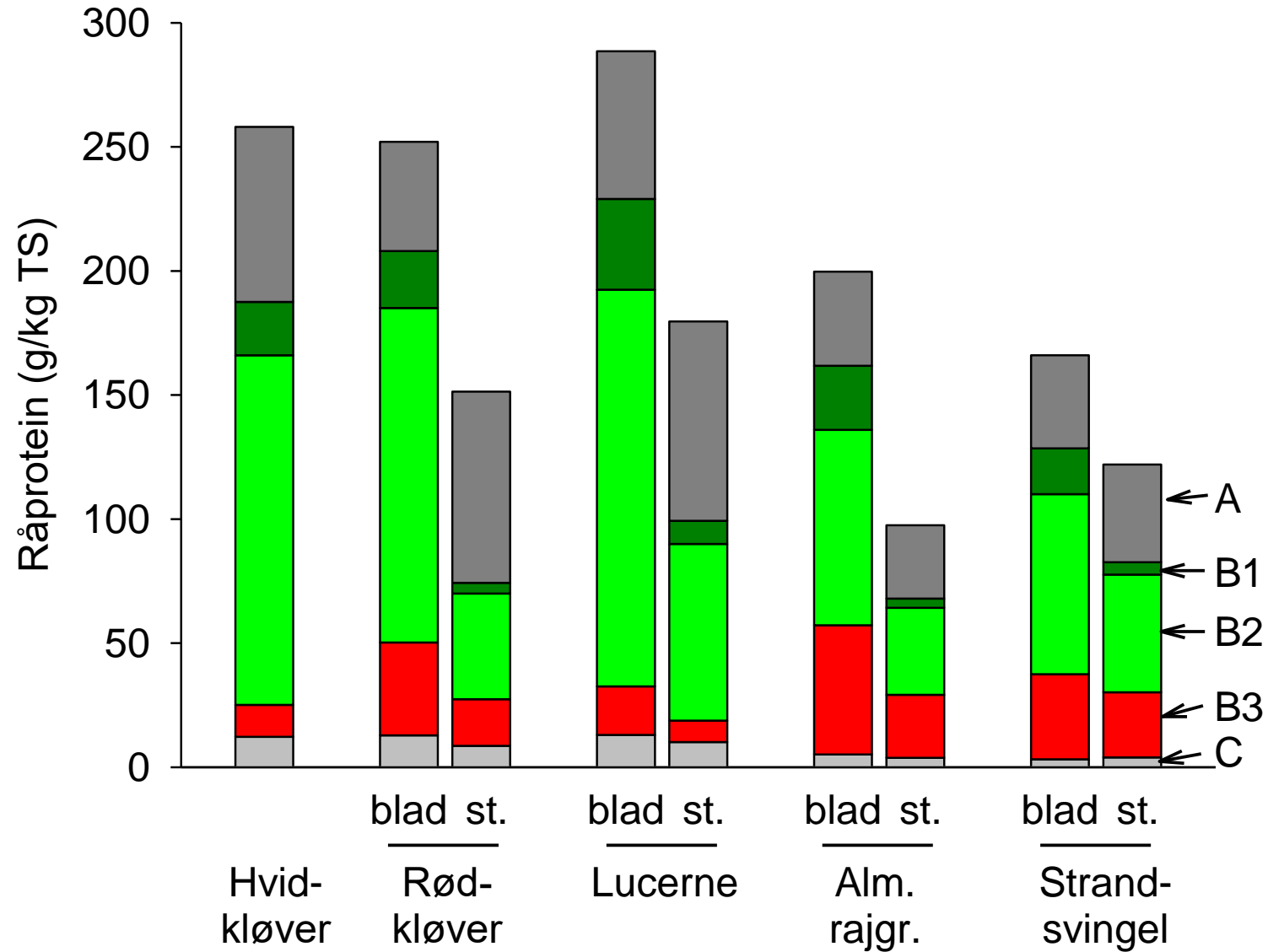
Protein

N i plantemateriale



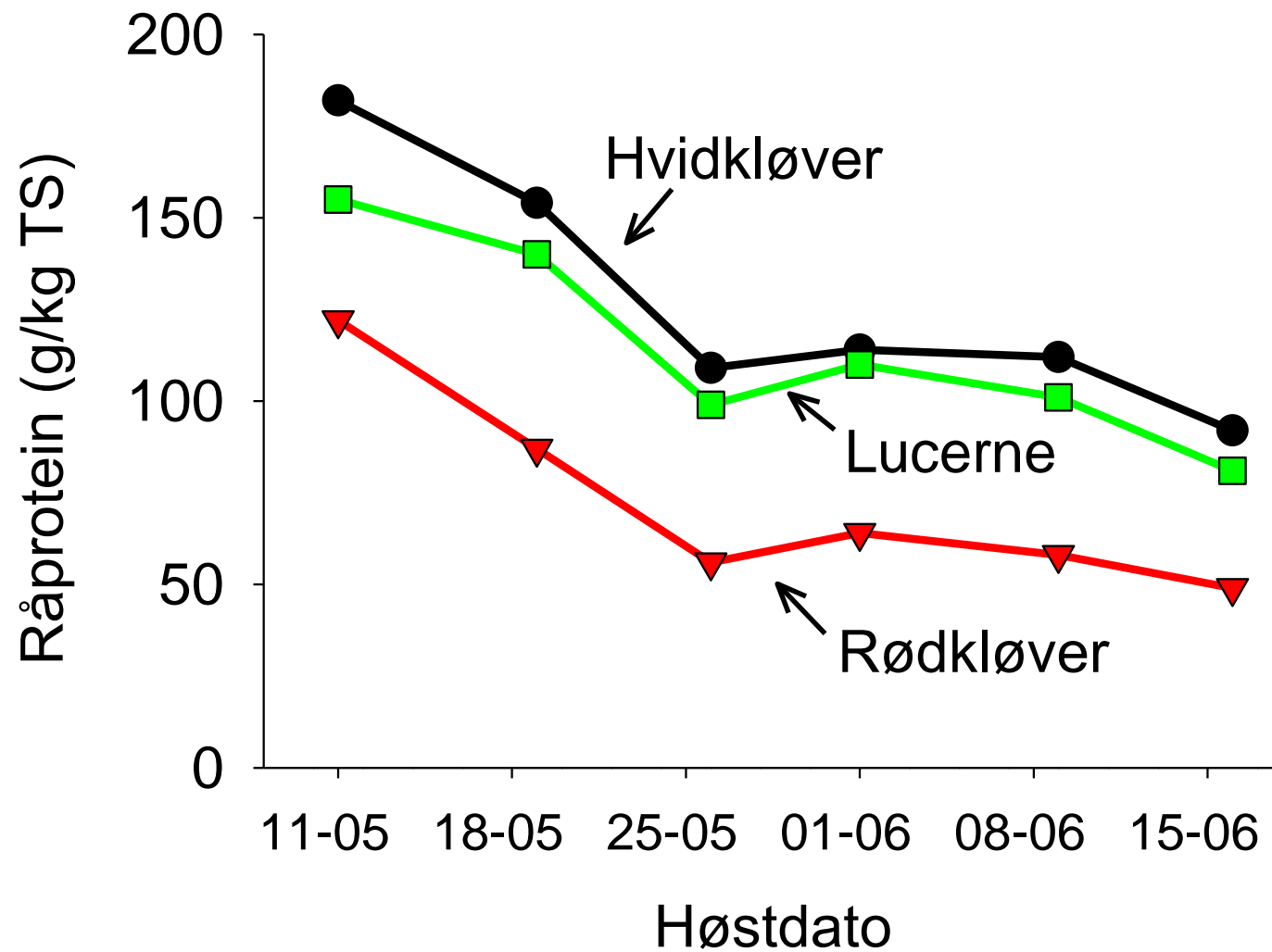


Protein i bælgplanter og græs



Proteinfraktioner

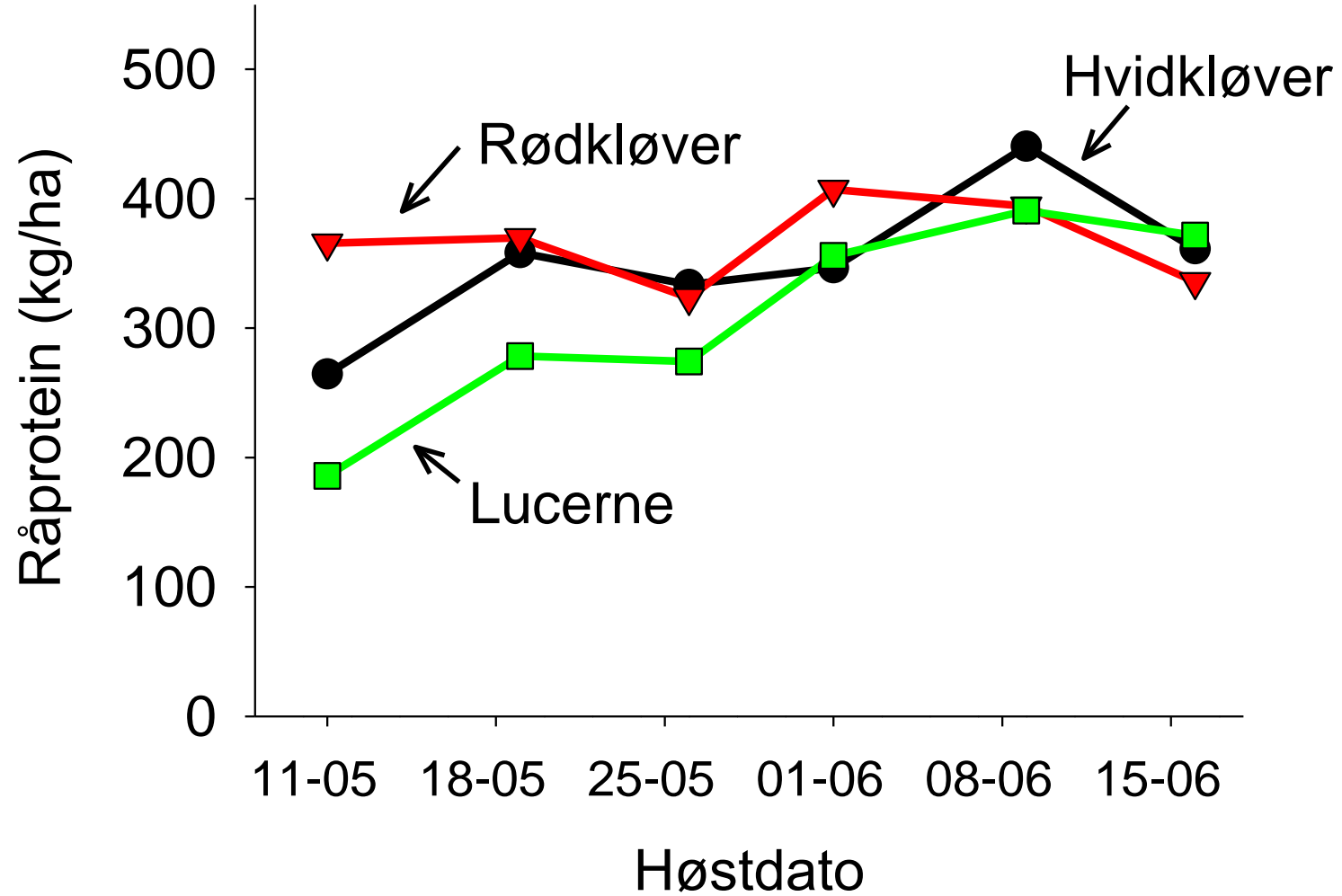
B1+B2





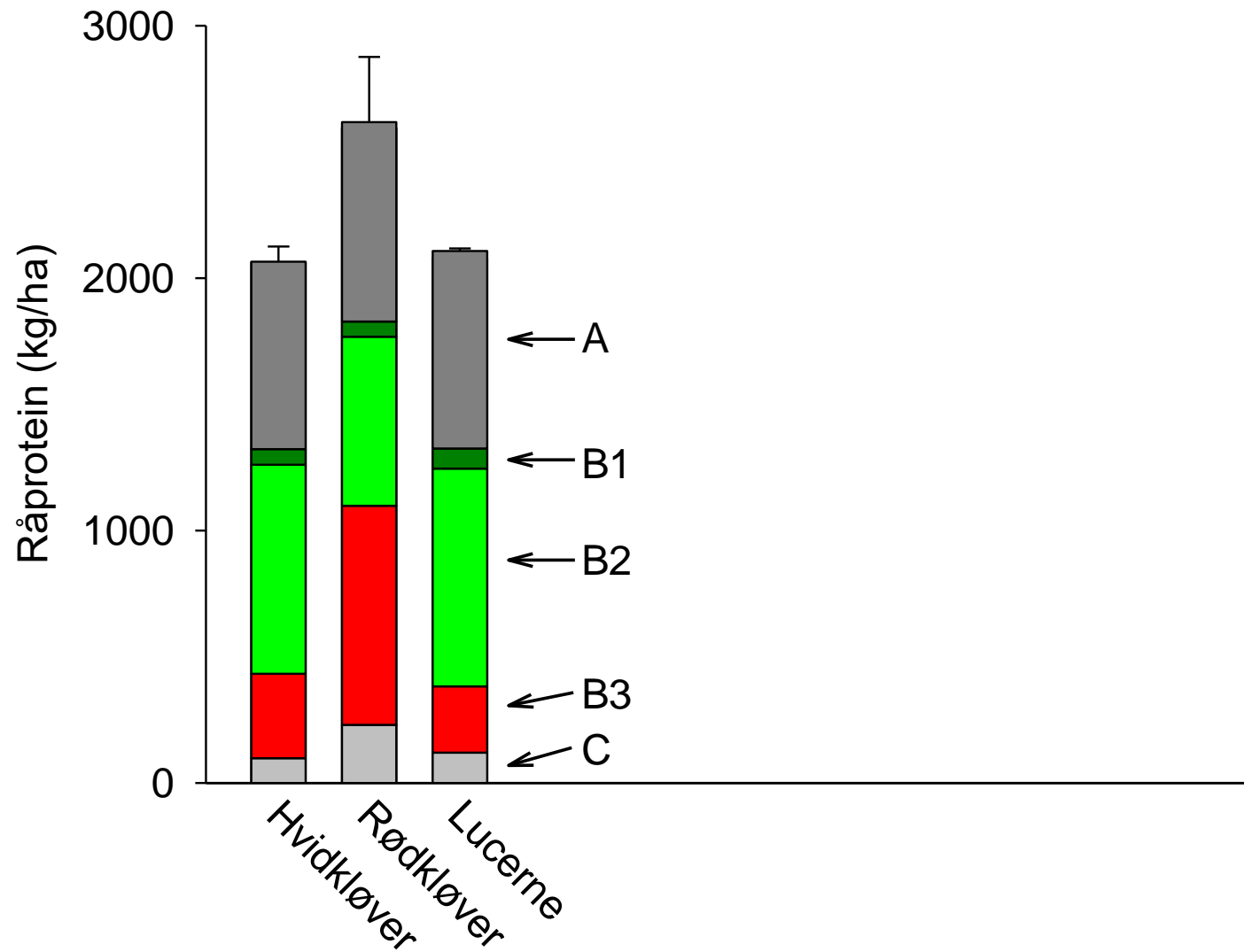
Proteinfraktioner

B1+B2



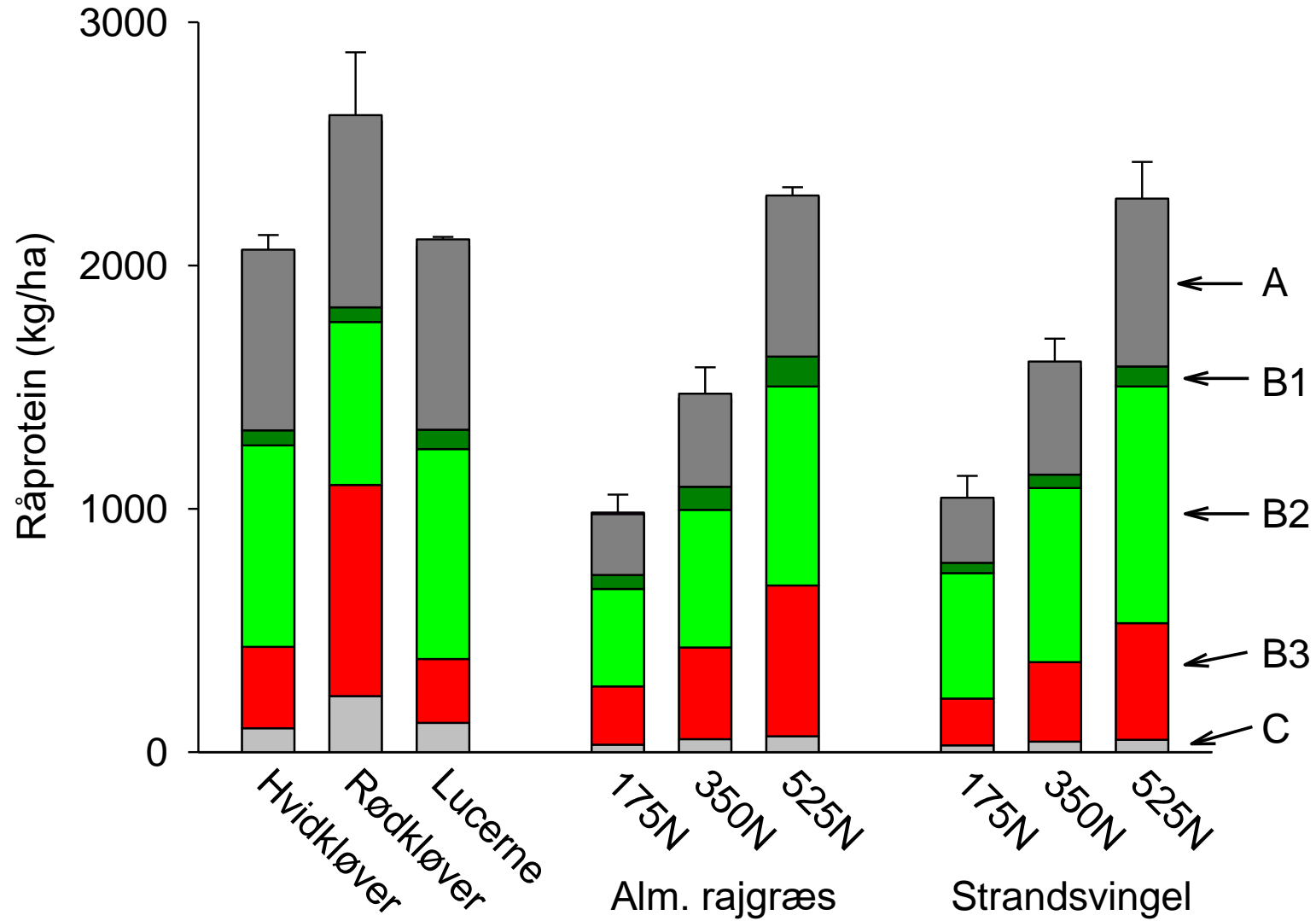
Proteinudbytter

4 slæt pr. år

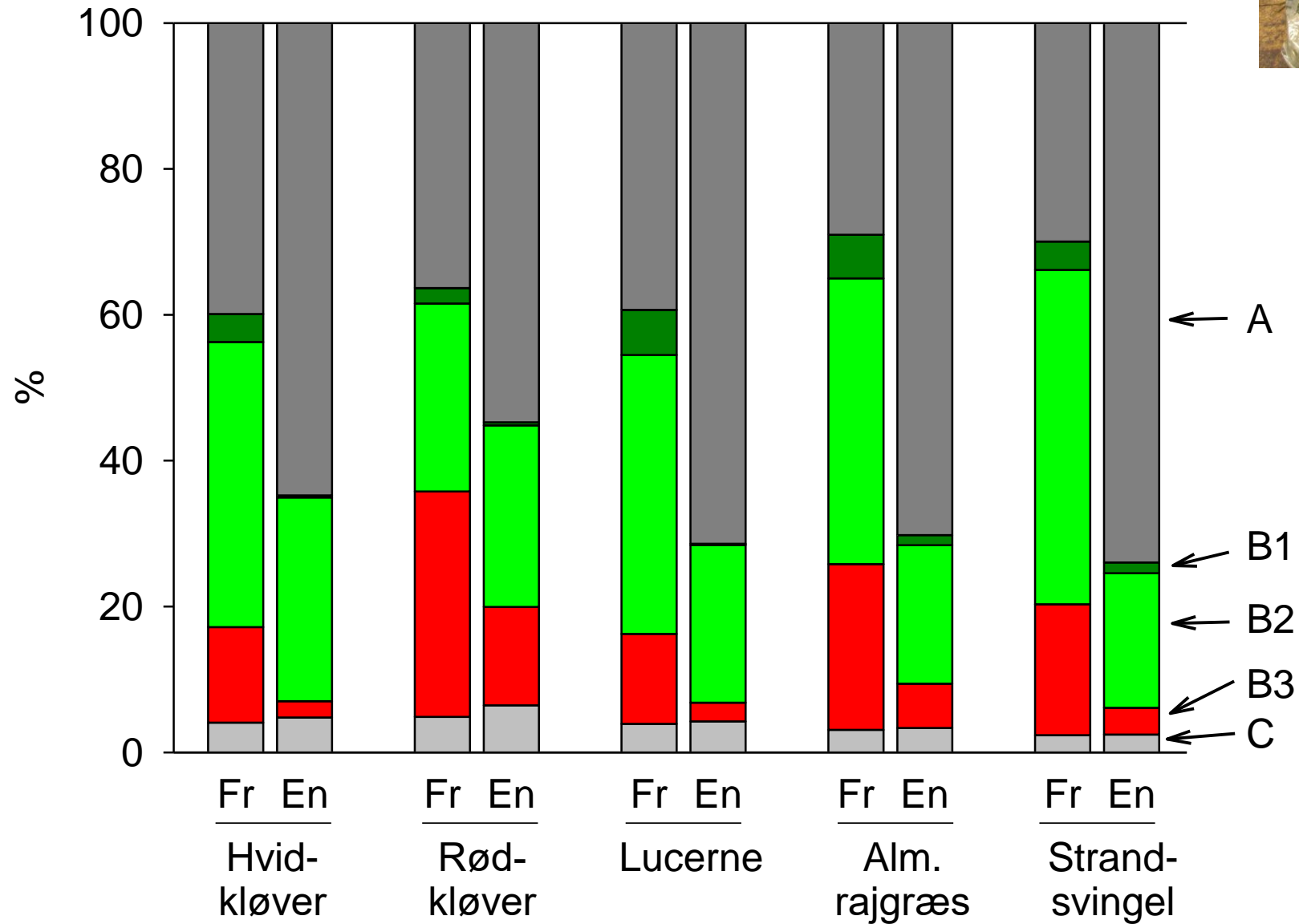


Proteinudbytter

4 slæt pr. år



Frisk eller ensileret?





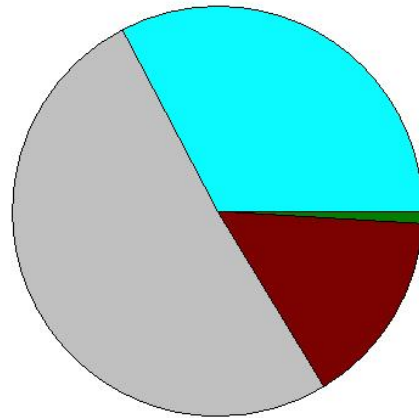
Jordens frugtbarhed

- Symbiotisk N₂-fiksering (3-500 kg N/ha)
eftervirkning >100 kg N/ha
- Kulstofopbygning ~ 1 tons C/ha/år
- Recirkulering af brunsaft og bioforgasset
fiberfraktion

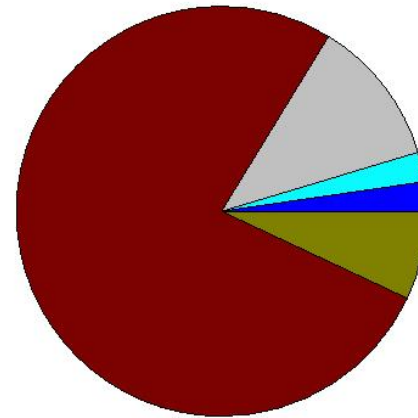
Bestøverprofil for bælgplanter



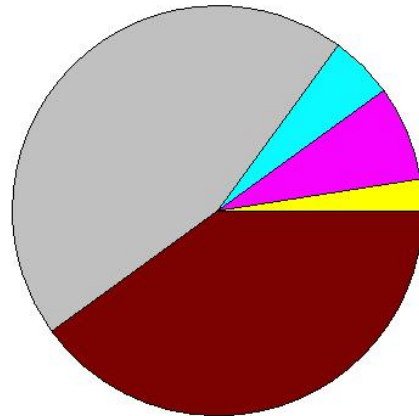
Hvidkløver



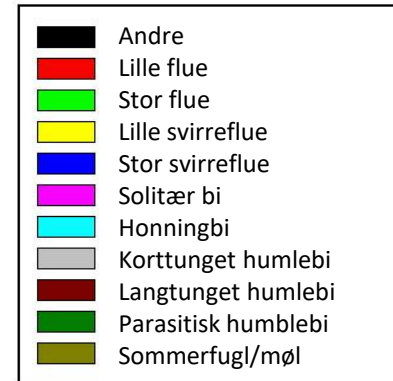
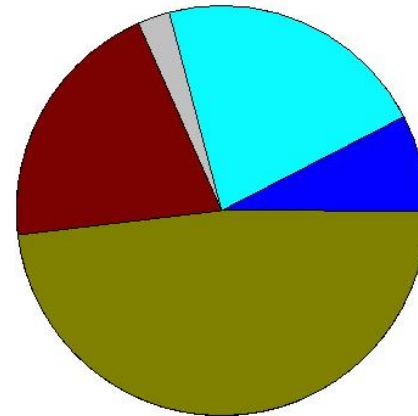
Rødkløver



Kællingetand

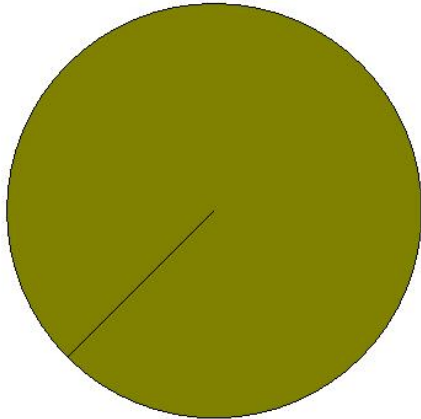


Lucerne

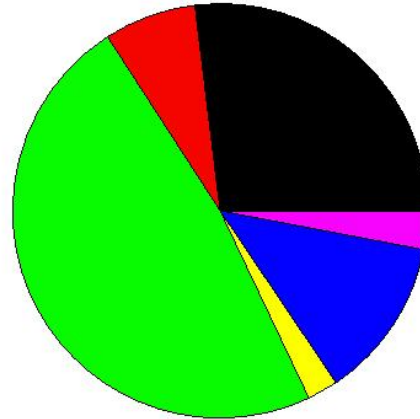


Bestøverprofil for urter

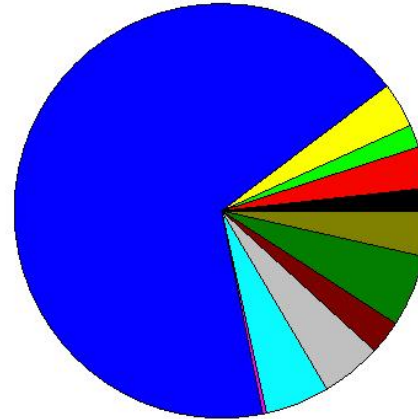
Mælkebøtte



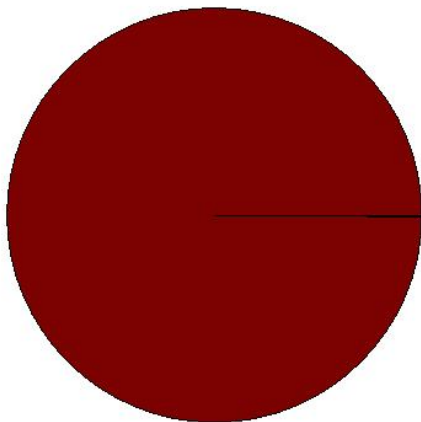
Kommen



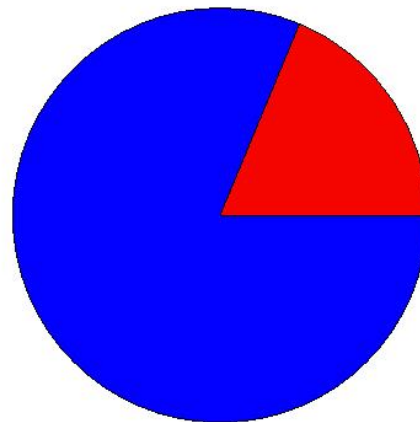
Blåhat



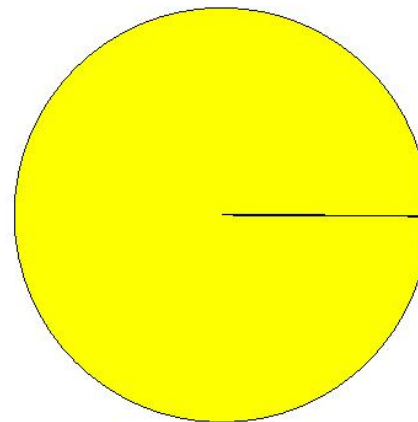
Brunelle



Røllike



Vejbred

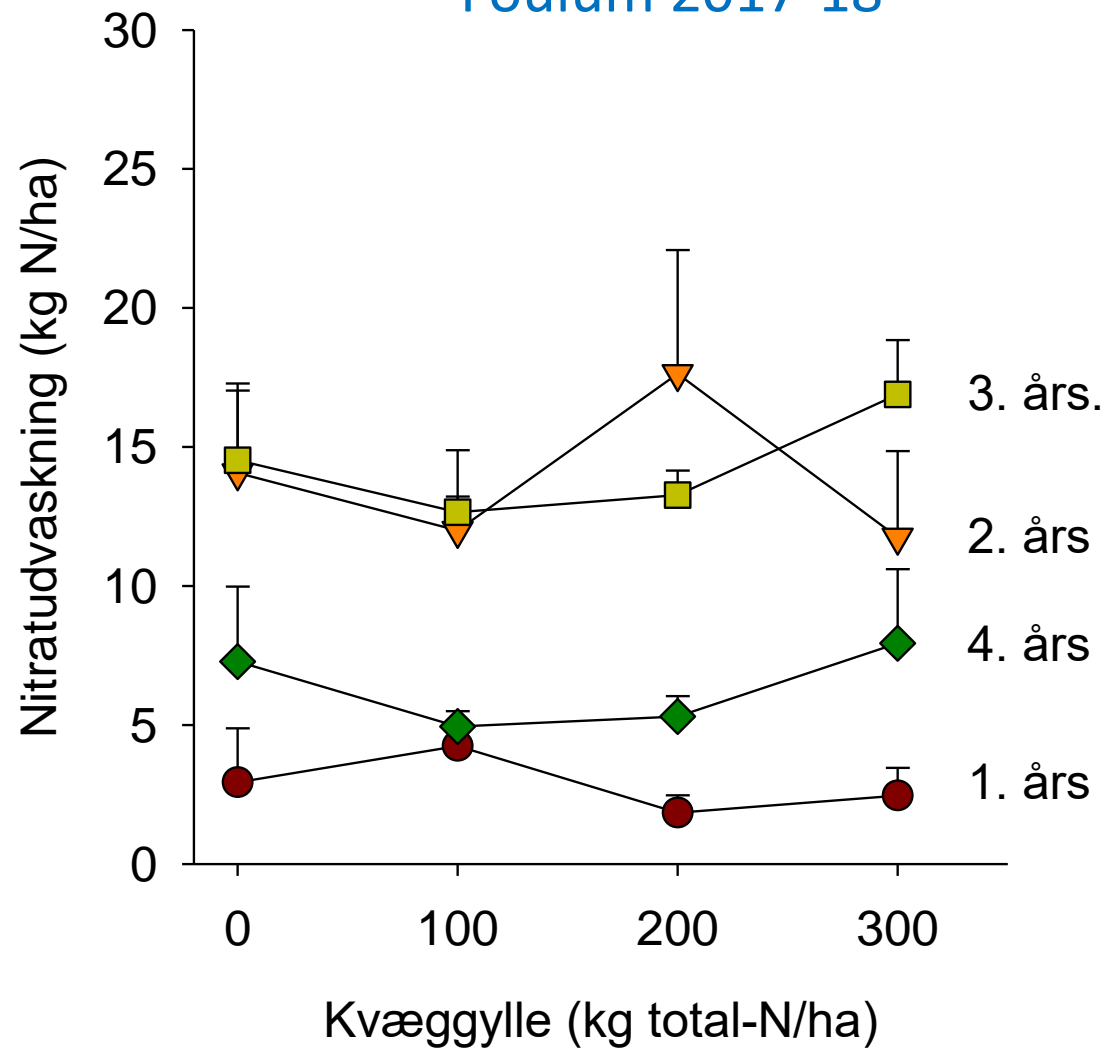


Andre	Andre
Lille flue	Lille flue
Stor flue	Stor flue
Lille svirreflue	Lille svirreflue
Stor svirreflue	Stor svirreflue
Solitær bi	Solitær bi
Honningbi	Honningbi
Korttunget humlebi	Korttunget humlebi
Langtunget humlebi	Langtunget humlebi
Parasitisk humlebi	Parasitisk humlebi
Sommerfugl/møl	Sommerfugl/møl



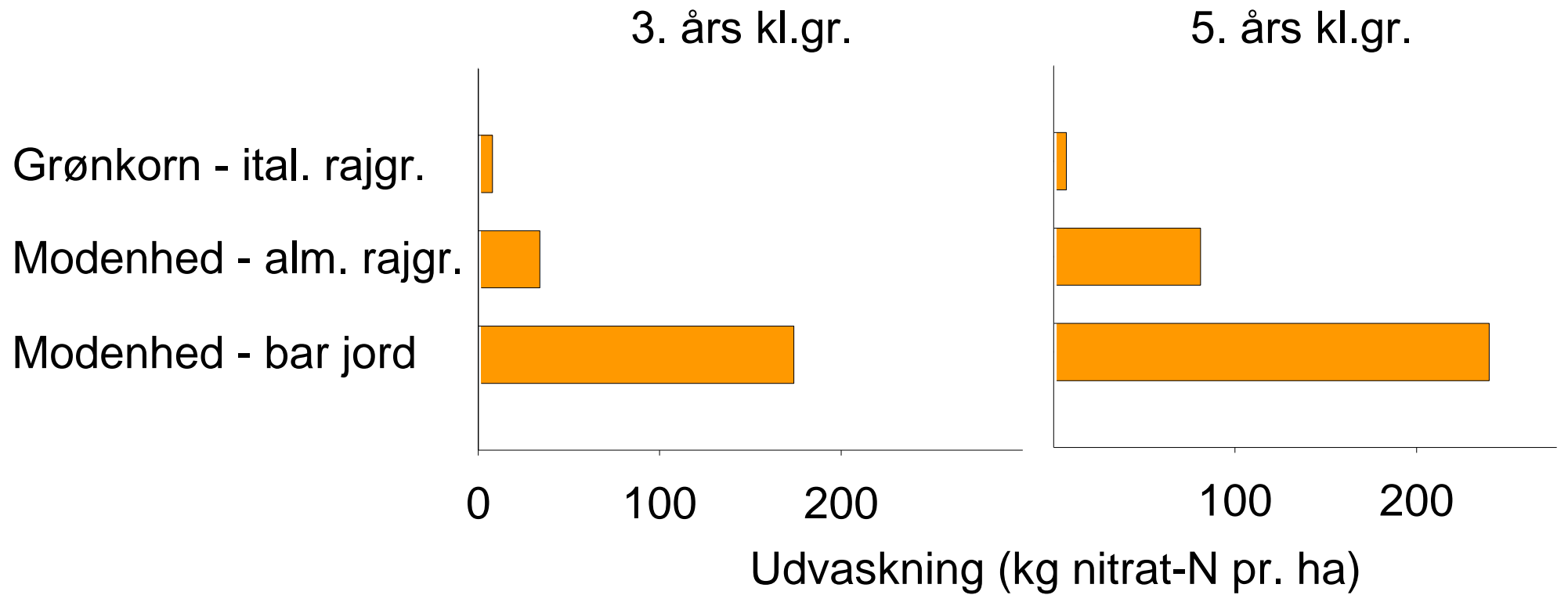
Udvaskning fra kløvergræs

Foulum 2017-18





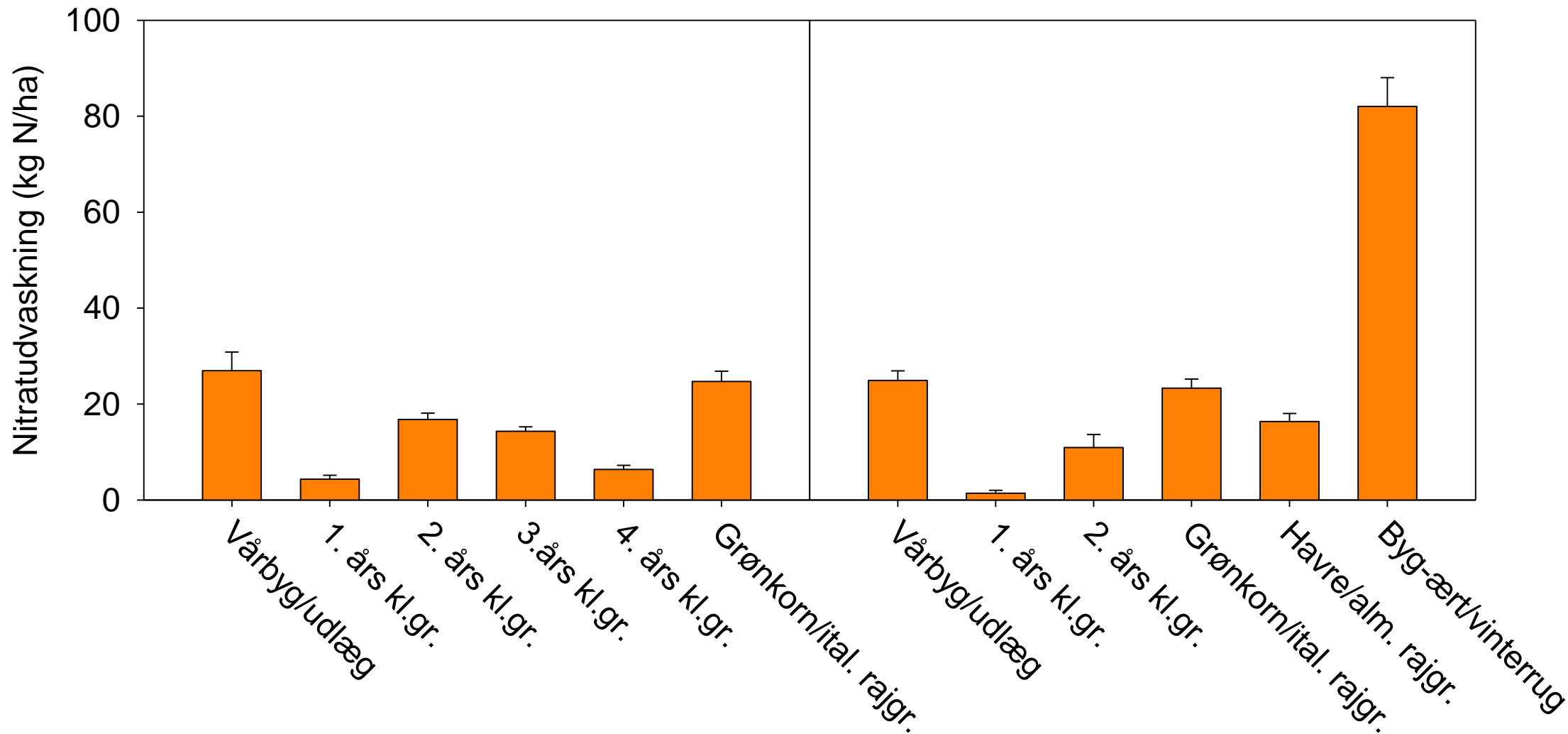
Udvaskning - korn efter græs



Udvaskning fra sædskifter med græs

67 % græs

33 % græs





Proteinproduktion i praksis

- Bælgplanter med lidt græs - ugødet
- Protein i kombination med grovfoder, biogas og grøngødning – strategiske slæt
- Tænk sideeffekter ind: Kvælstof, kulstoflagring, biodiversitet
- N-virkemiddel, som stiller krav til sædskiftet

A close-up photograph of a lush green field of clover plants. The plants have characteristic three-lobed leaves and several upright stems topped with brown, fuzzy seed heads. The scene is filled with vibrant green foliage, and the overall appearance is that of a healthy, growing meadow or pasture.

Tak for opmærksomheden!