

Forædling af blandinger og populationer



Workshop om økologisk planteforædling

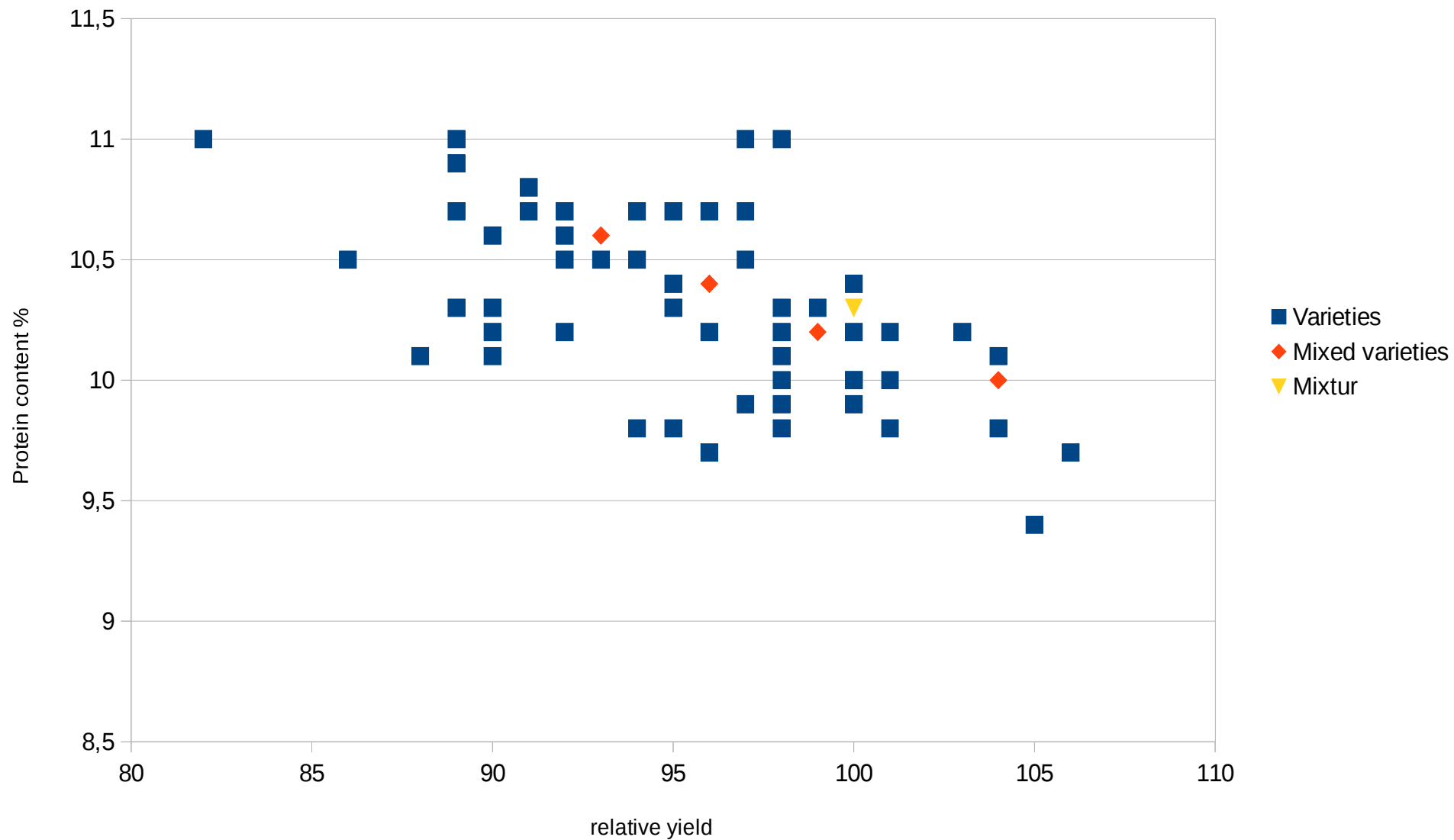
Hotel Opus Horsens

29. februar 2016

Anders Borgen

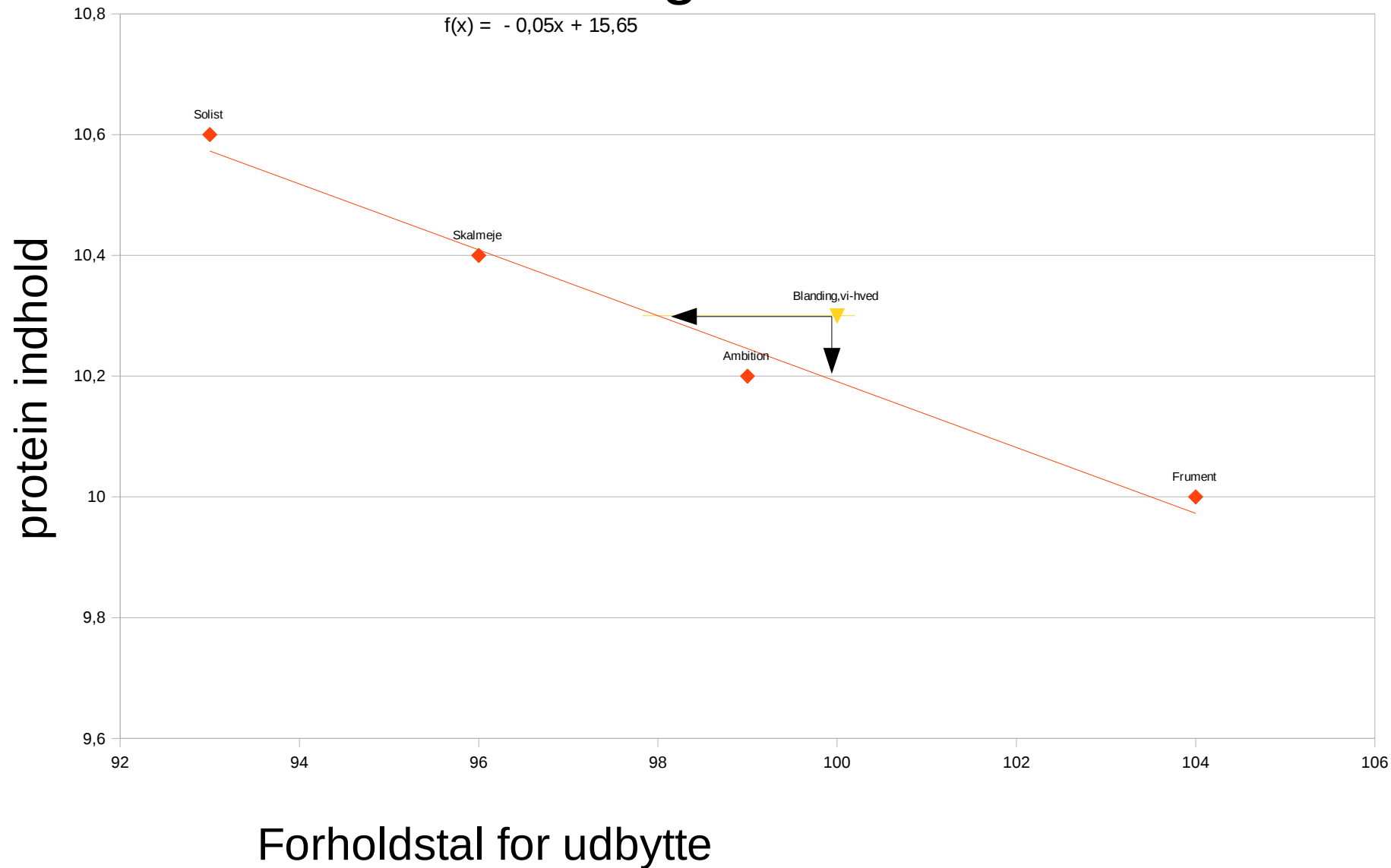
Landsforsøgene 2007

Winter wheat

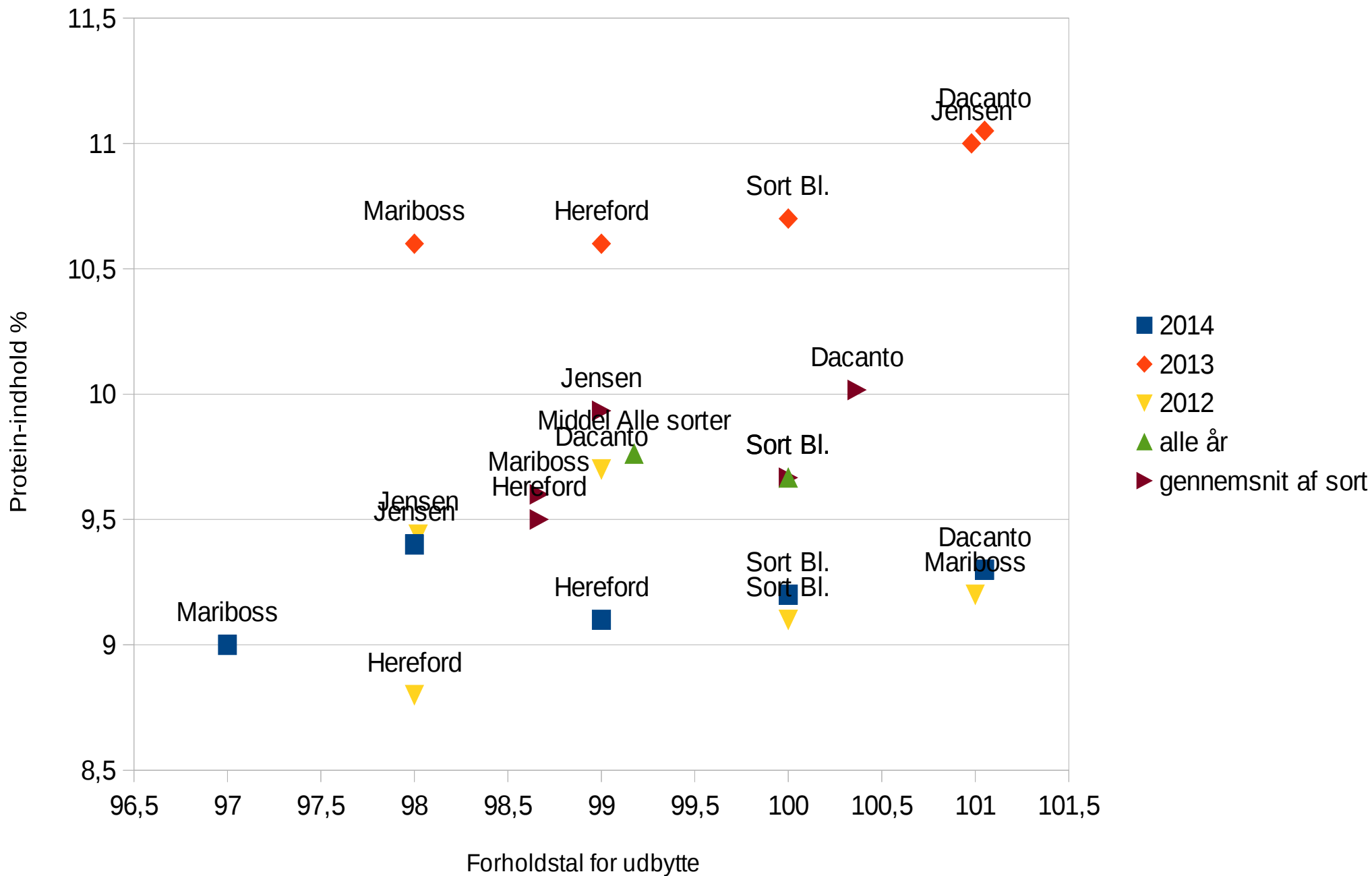


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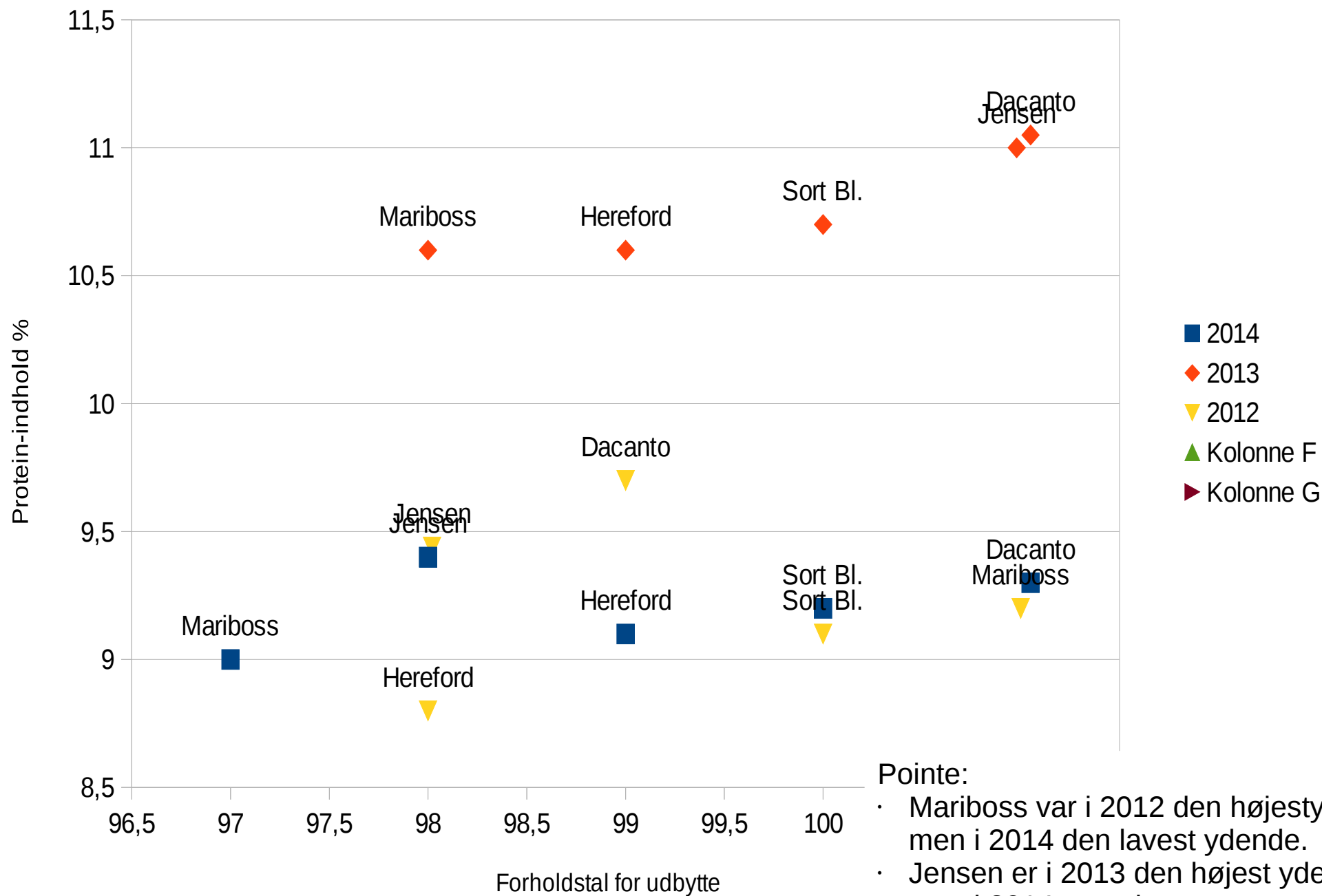
Landsforsøgene 2007



Vinterhvede - Landforsøgene

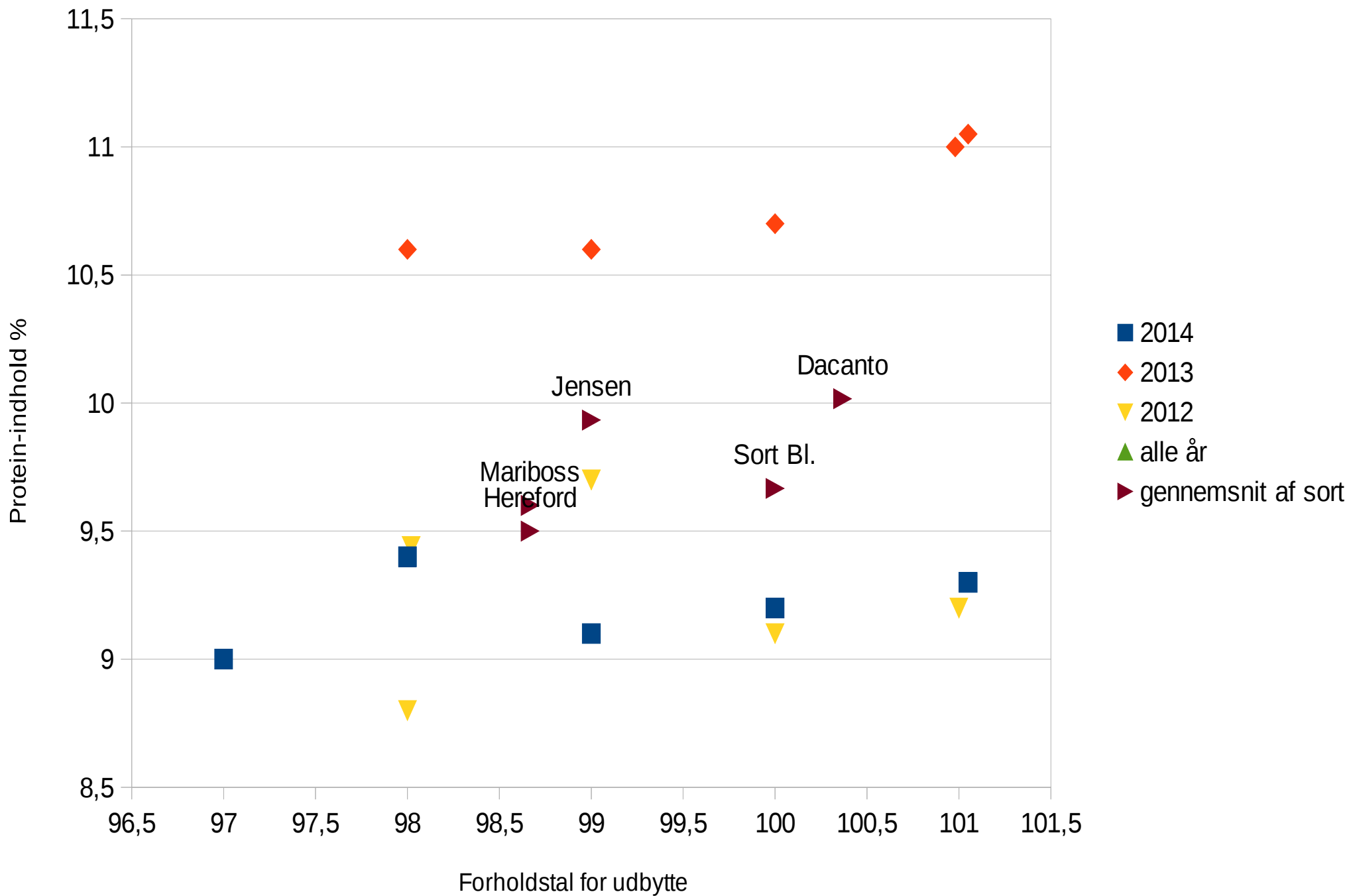


Vinterhvede - Landforsøgene



- Pointe:
- Mariboss var i 2012 den højestydende, men i 2014 den lavest ydende.
 - Jensen er i 2013 den højest ydende, men i 2014 næst laveste

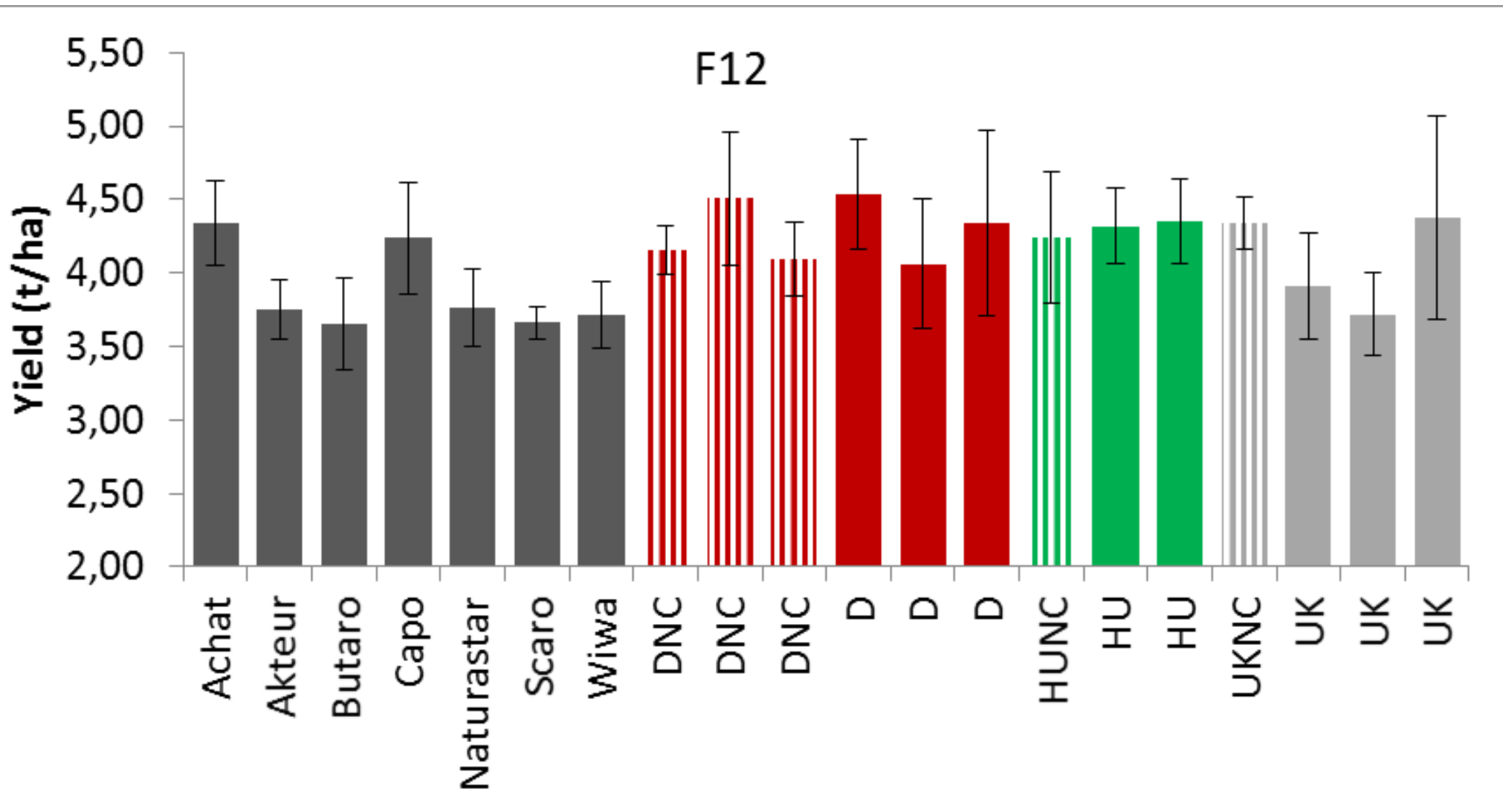
Vinterhvede - Landforsøgene



Delkonklusion: En lille smule diversitet i form af
sortsblandinger giver en lille smule højere udbytte

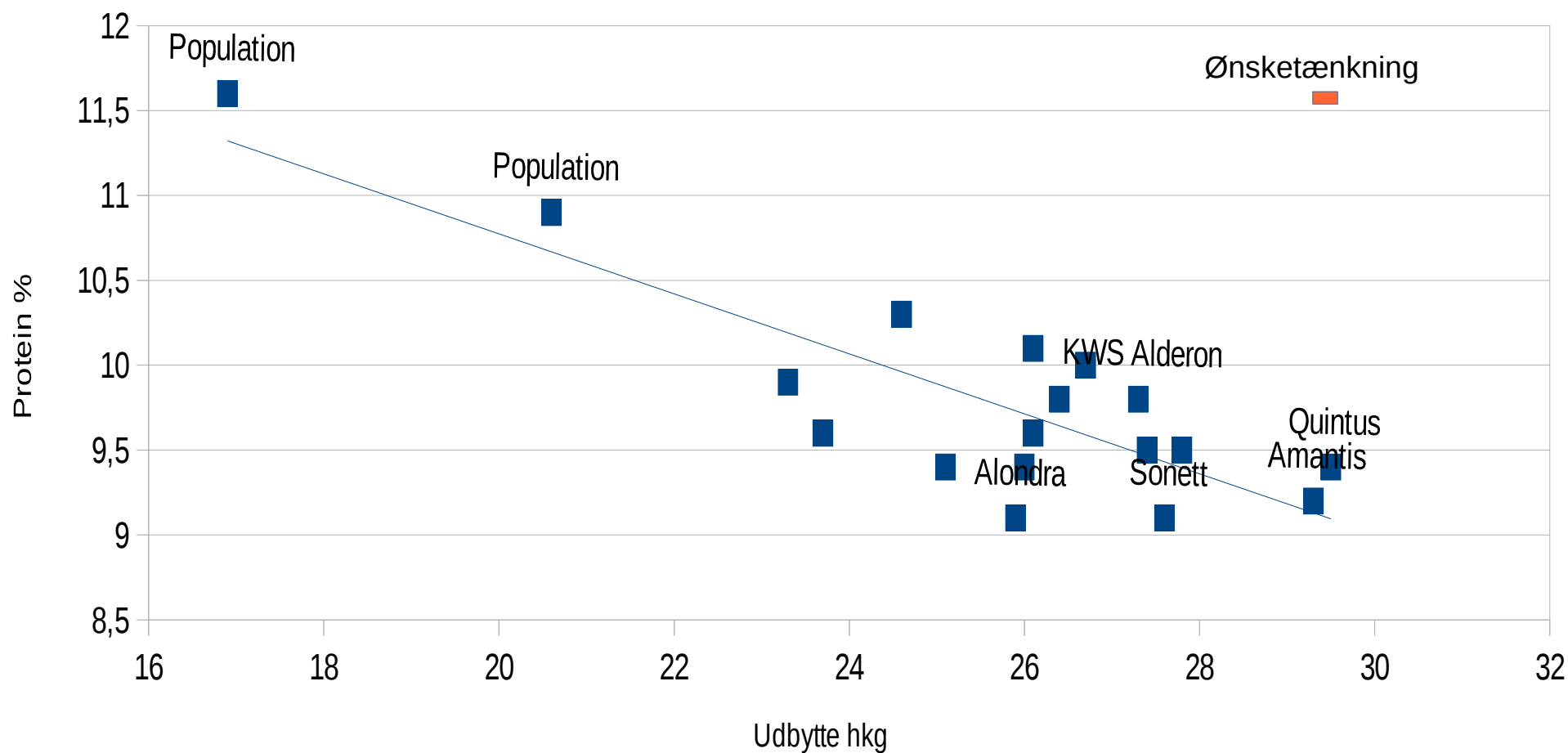
Hypotese: Større diversitet vil give endnu mere
udbytteforøgelse

COBRA trials

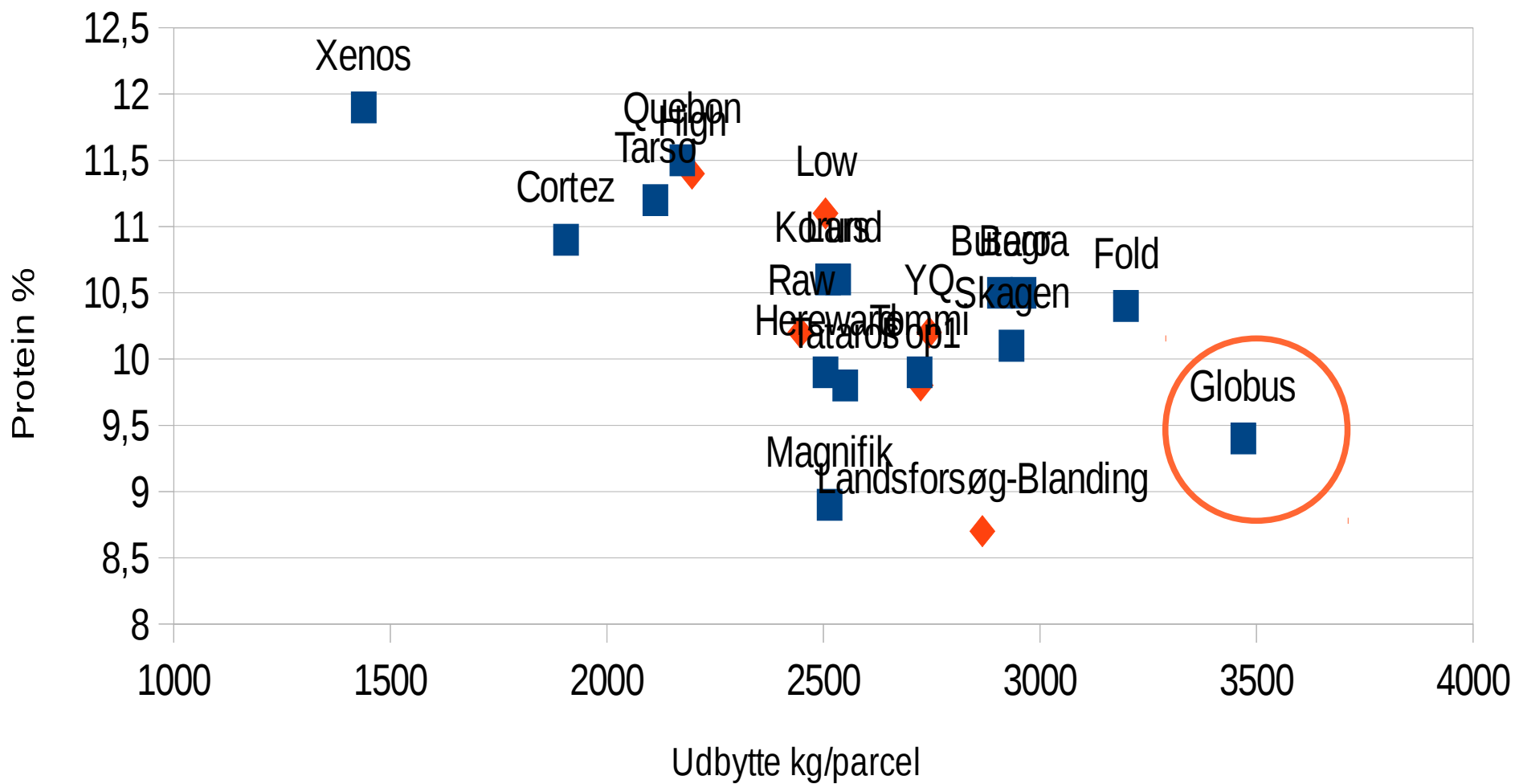


Vårhvede

FREJ-forsøg 2015

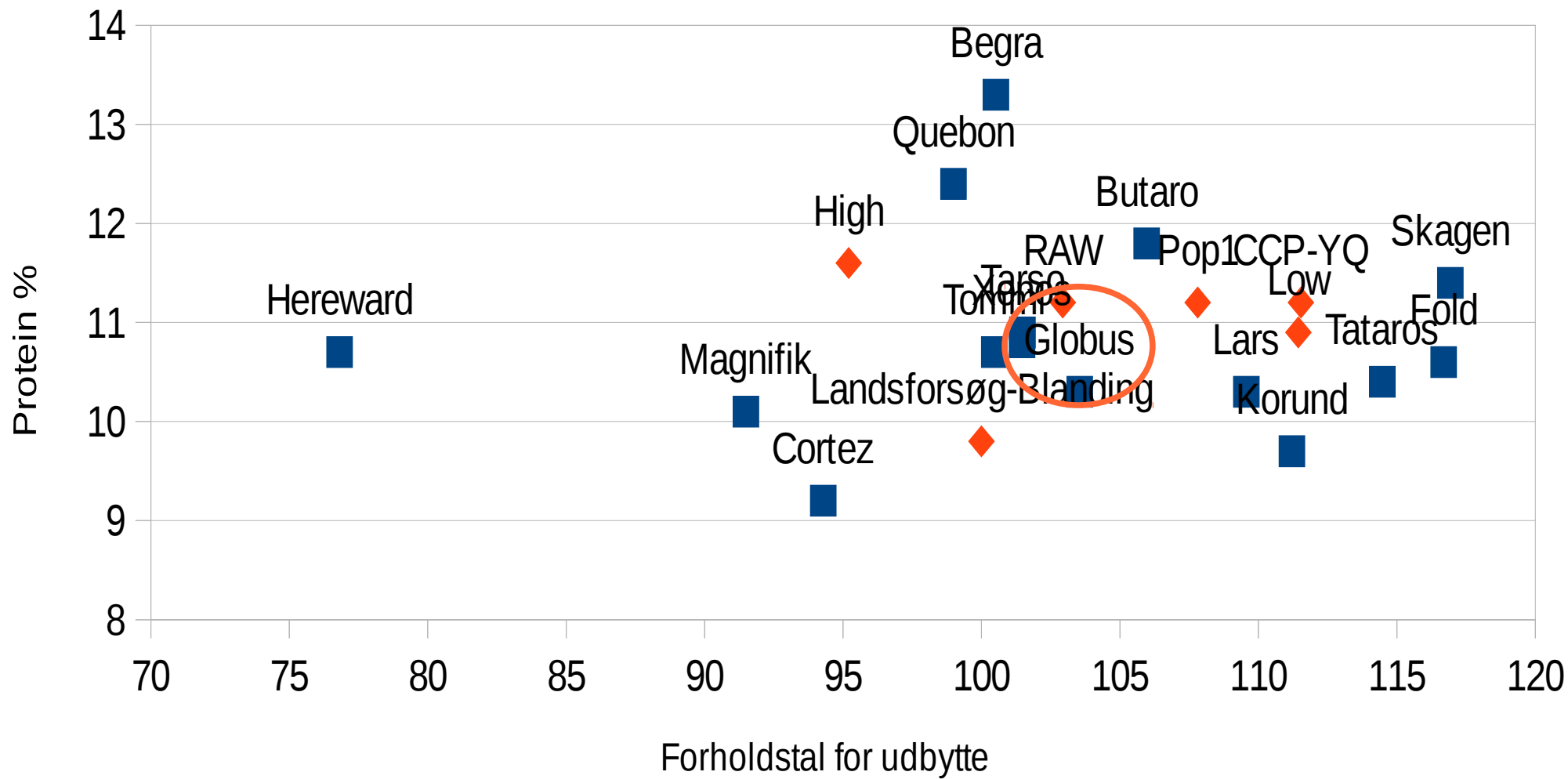


Vinterhvede
BIOBREED projektet
Falslevgård 2013

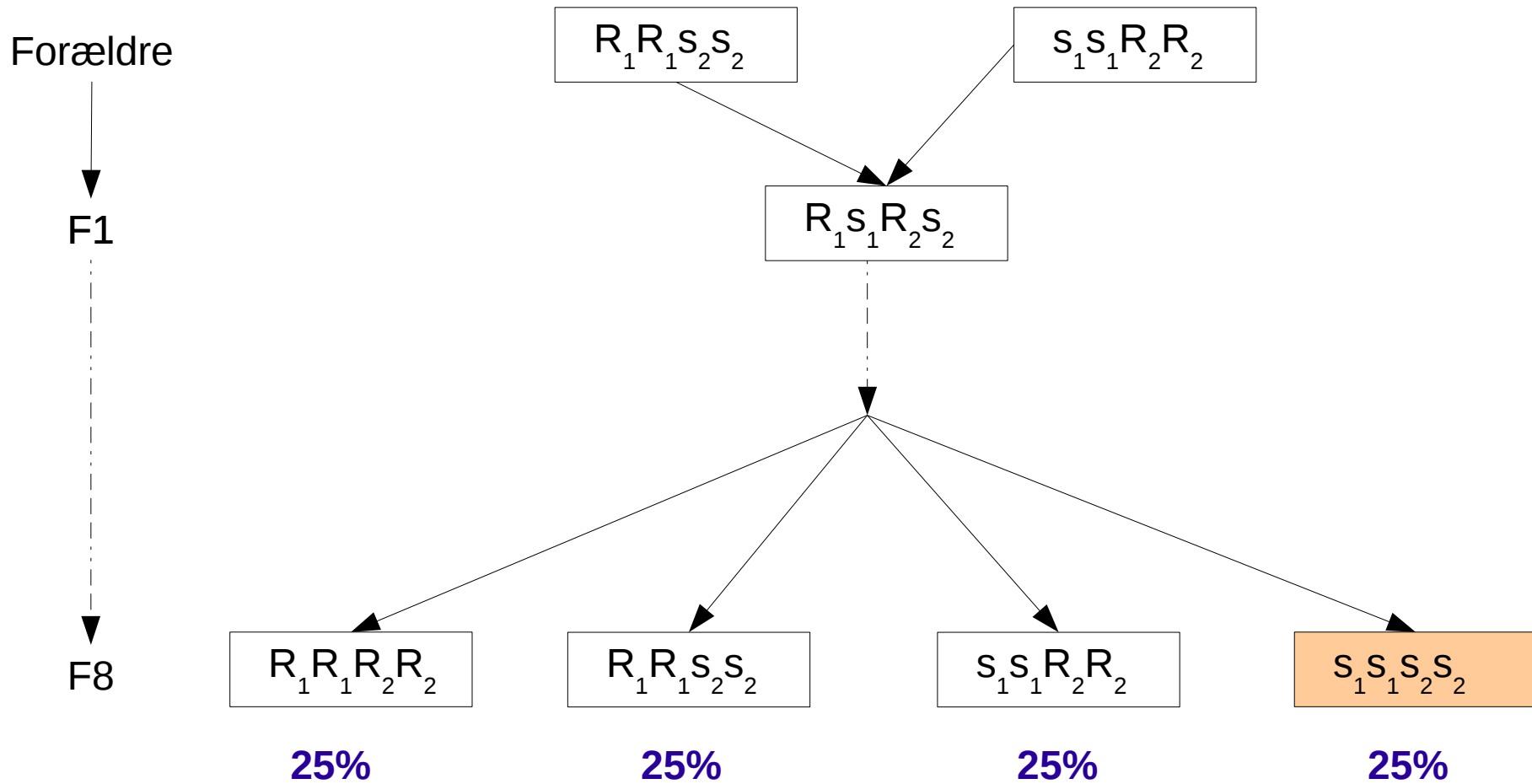


Vinterhvede

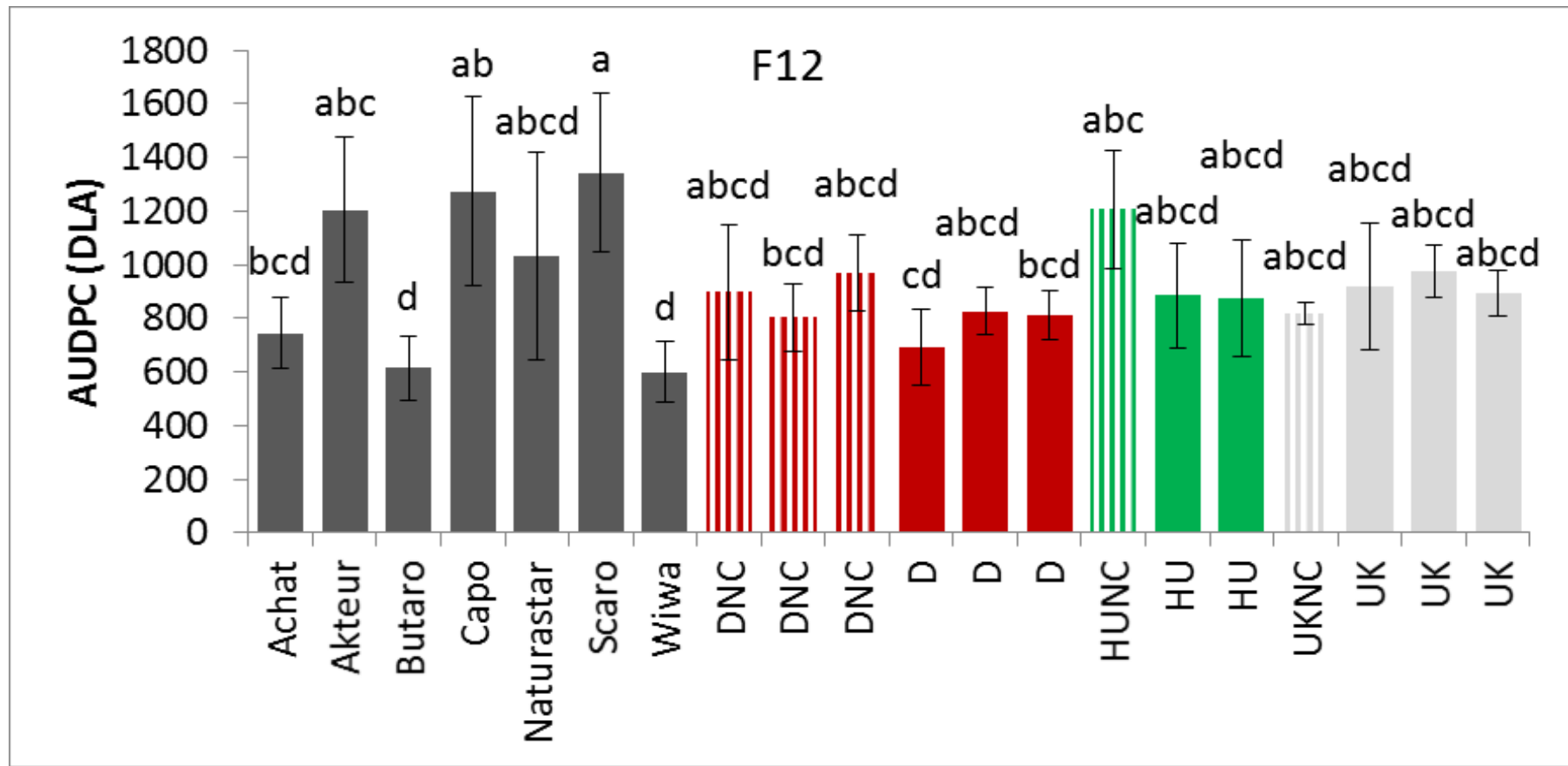
BIOBREED Højbakke 2013



Problemet med populationsforædling



Forekomst af bladsygdomme i CCPs



CCP
Winter wheat
with a disgusting
infection of stripe rust
(*Puccinia striiformis*)

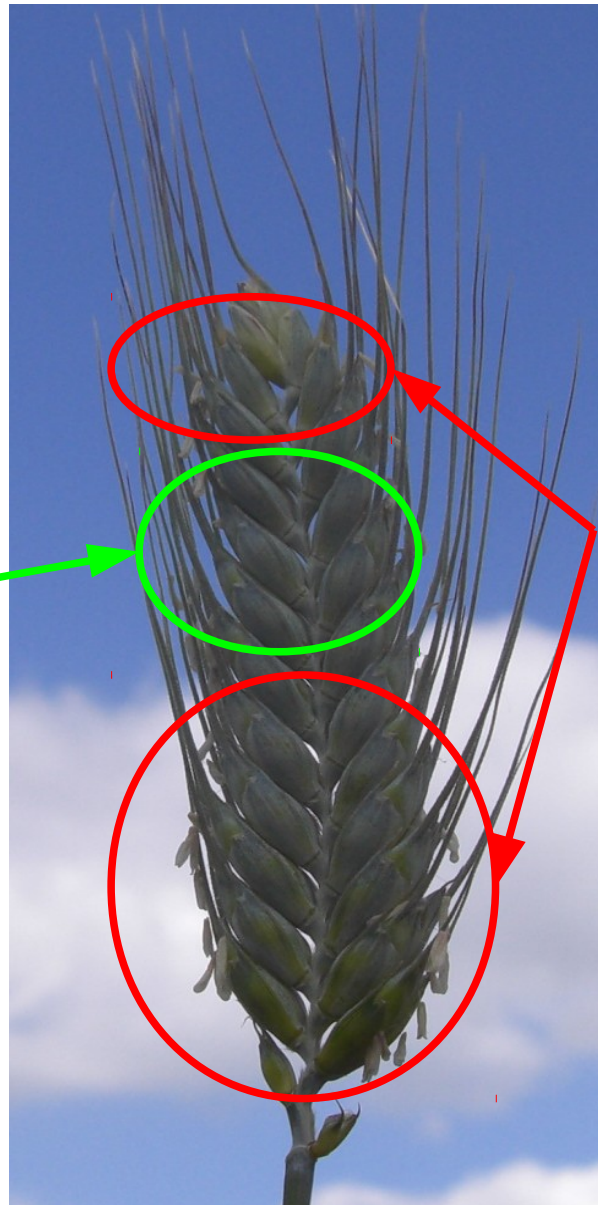


CCP
German spring wheat.
Stripe rust (*Puccinia
striiformis*) in
development



Quality improvement in populations

Long grain
filling period:
Big low protein
soft seed



Short grain filling period:
Small hard high protein seeds

Near Infrared Spectroscopy (NIRS)



BoMill TriQ sorters

NIR protein sorting of Pop-All-2012



**High protein
fraction
Hard seed**

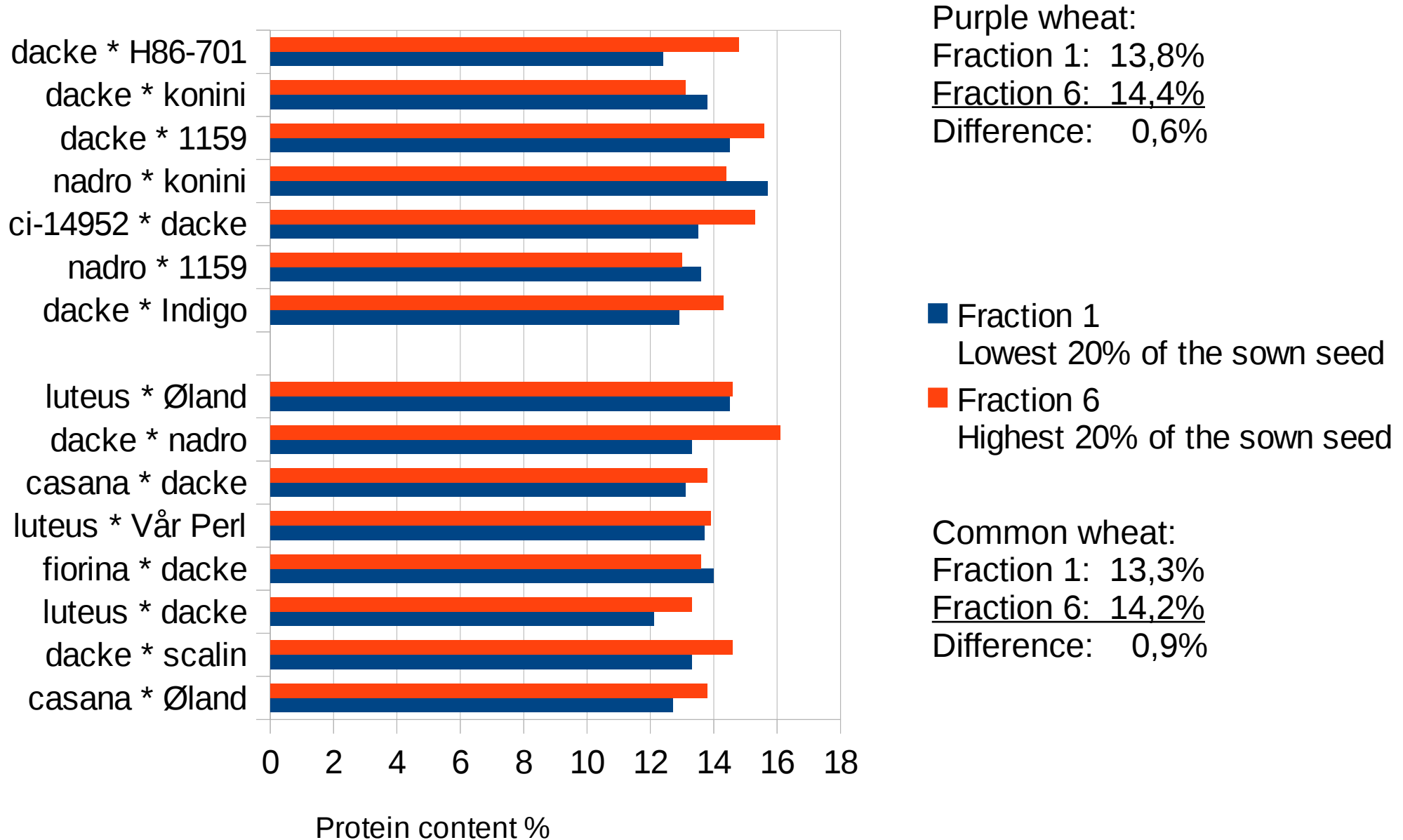


**Low
protein
fraction
Soft seed**

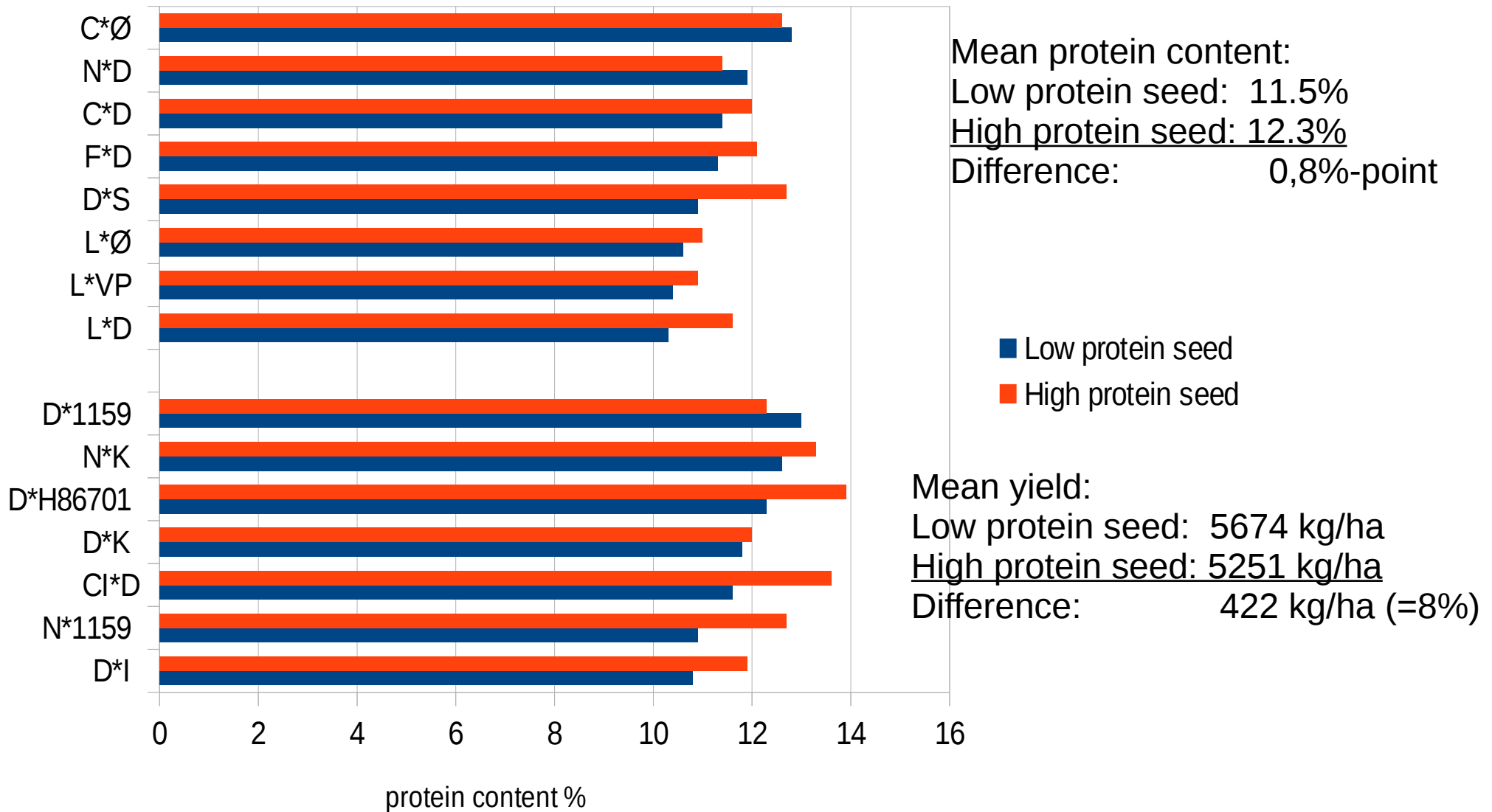


Two years of seed sorting

Protein content in harvested grain



2015: repeated growing without sorting



Konklusion

Homogene sorter

- Morfologisk ensartede og stabile
- Udbytte og kvalitetsmæssigt uensartede og ustabile
- Gode muligheder for specifik kvalitet
- Velkendte forædlingsmetoder
- Lette at kontrollere
- Kan plantenyhedsbeskyttes
- Dyre at registrere
- Gode for såsædsindustrien

Populationer og blandinger

- Morfologisk uensartede og dynamiske
- Udbyttmæssigt bedre, og mere ensartede og stabile
- Behov og potentiale for forbedrede forædlingsmetoder
- Muligheder for at landmanden selv kan forædle videre
- Kan ikke plantenyhedsbeskyttes
- Pt. billige at registrere
- Gode for landmændene