

# Farmer's Network Fodder Trees and Multifunctional Land Use

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I N S T I T U T E



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**Stichting Duinboeren**  
samen sterk voor een gezonde toekomst

# Who we are?

- Cooperation
  - Louis Bok Institute: Research Institute on sustainable farming issues national and international
  - Platform “Duinboeren”: farmer’s group
- Project located in south of The Netherlands



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# Our goal

*Promote and integrate the multifunctional use of trees and shrubs in modern farming systems*

Trough

Knowledge development and knowledge sharing



# Objectives

- Multifunctional use of trees
- Positive balance due to multifunctionality
  - Energy
  - Fodder and stable litter
  - Landscape and environment (closing nutriënt cycles)
  - Biodiversity

–  $1+1+1+1=4!$
- Trees, third crop next to grass and maize



# Our approach

- Bottom-up
- Participation of dairy cow and goat farmers
  - Design of planting schemes
  - Meetings
  - Excursion
  - Field trials



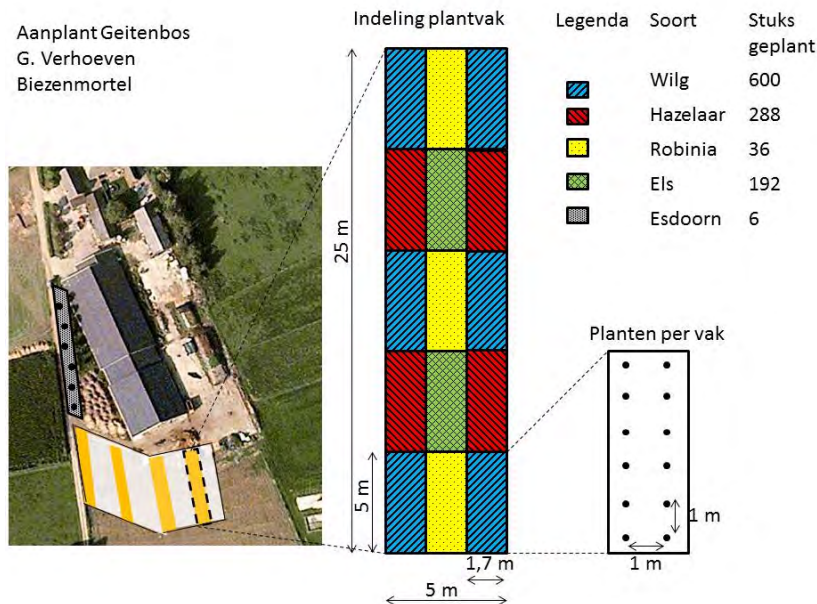
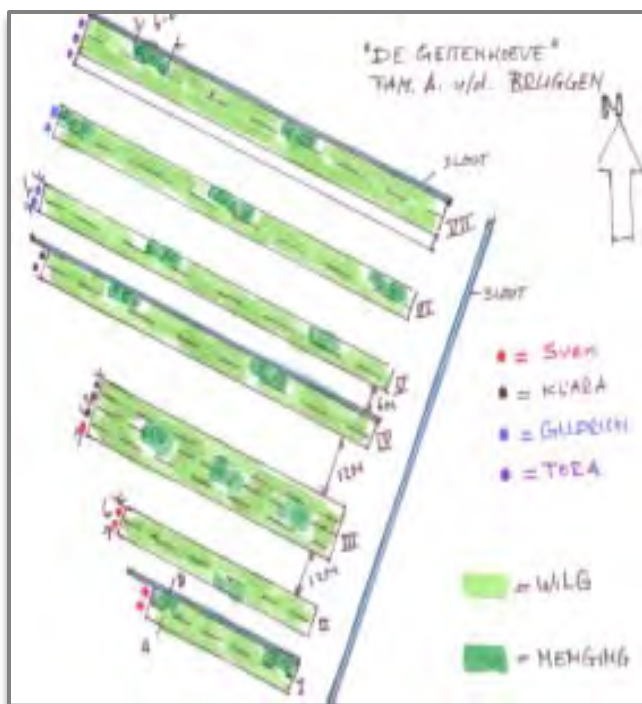
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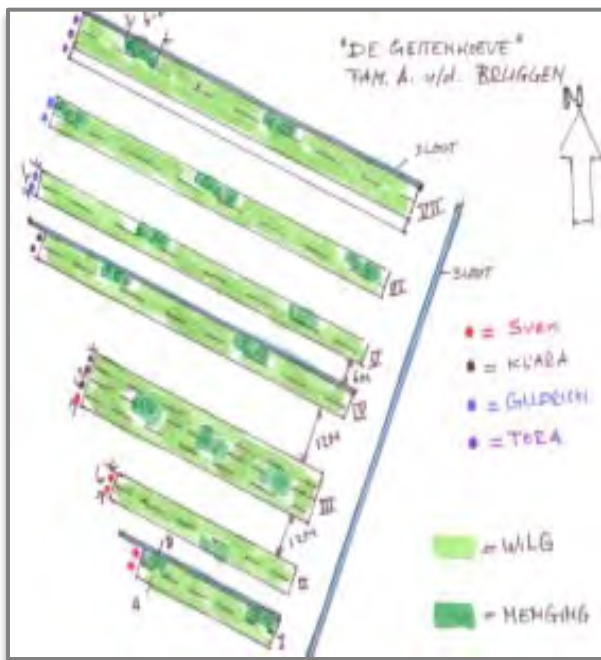




# Results

- Started april 2011
- 3 Planting schemes
- (2 dairy goat farm, 1 dairy cow farm)





Februari 2011

1st in April 2011: planting of 4 willow clones (Sven, Klara, Gudrun and Tora)

Selection based on production, disease resistance and palatability for animals

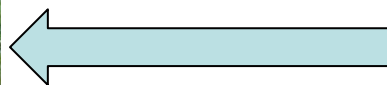


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April 2011



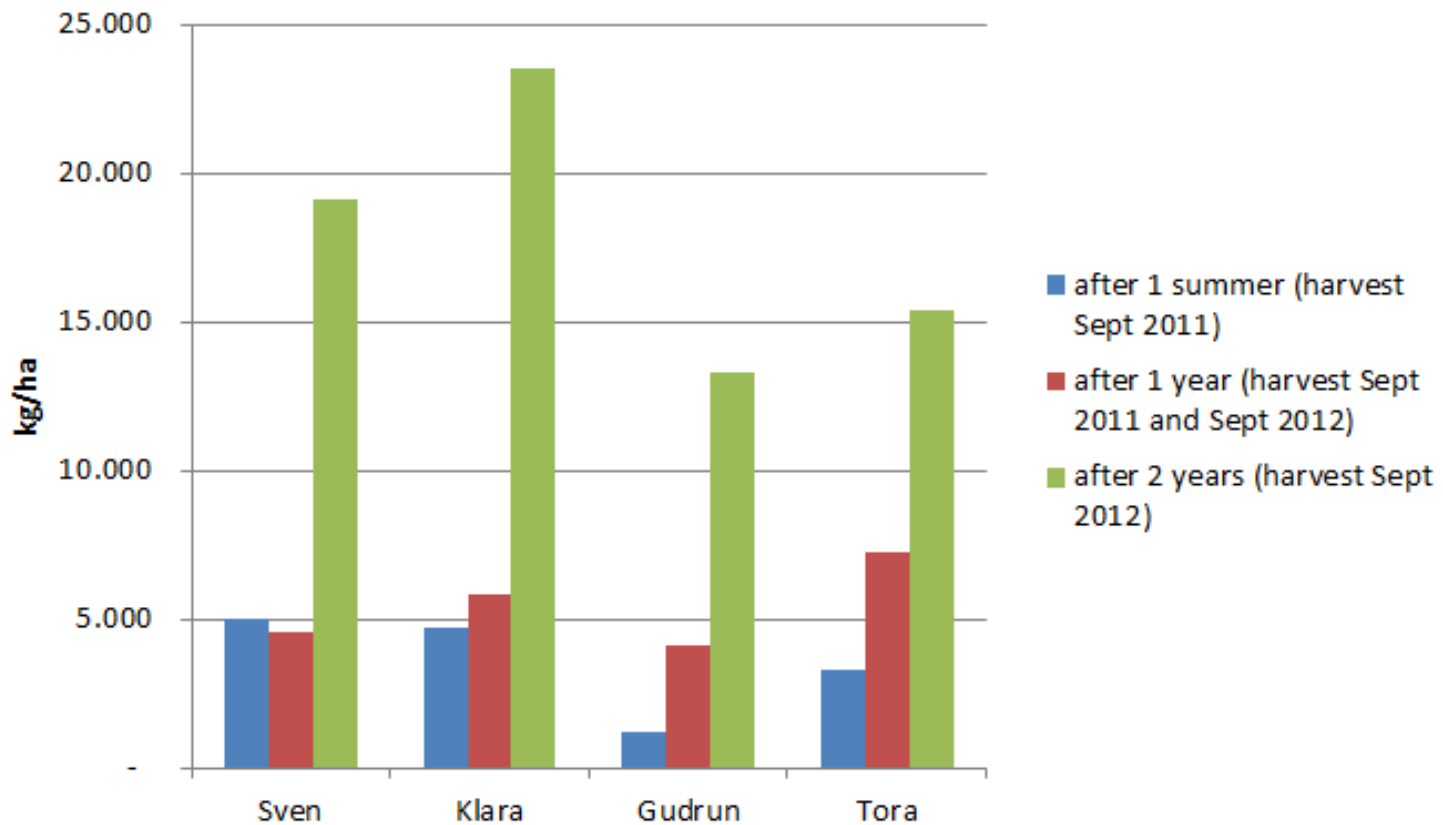
September 2012



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# Results total yield

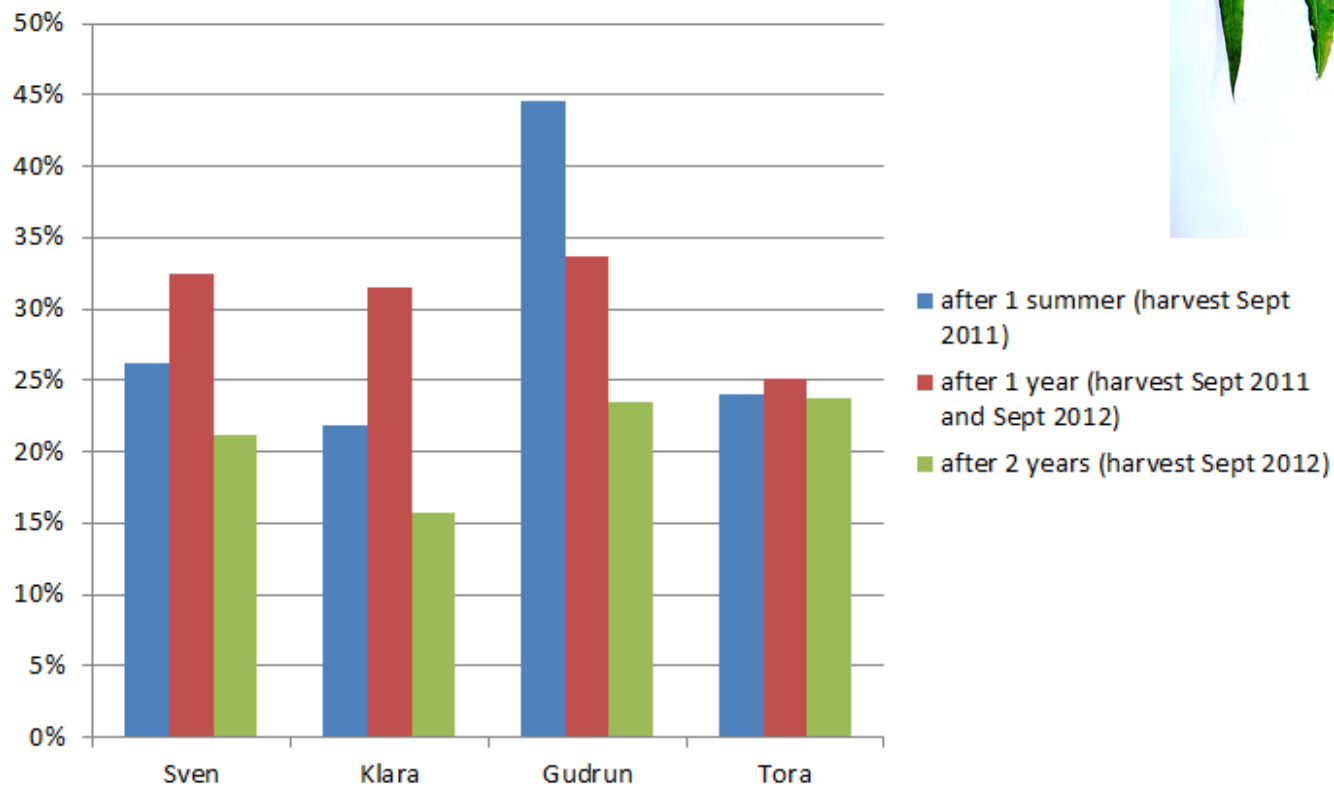
## Dry matter yield willow clones





# Results leaves

Leaf/wood ratio



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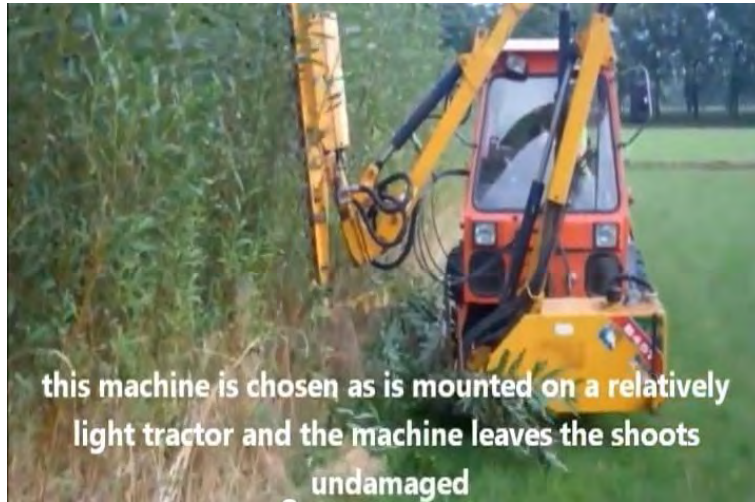
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# Results harvesting Seperating leaves from wood





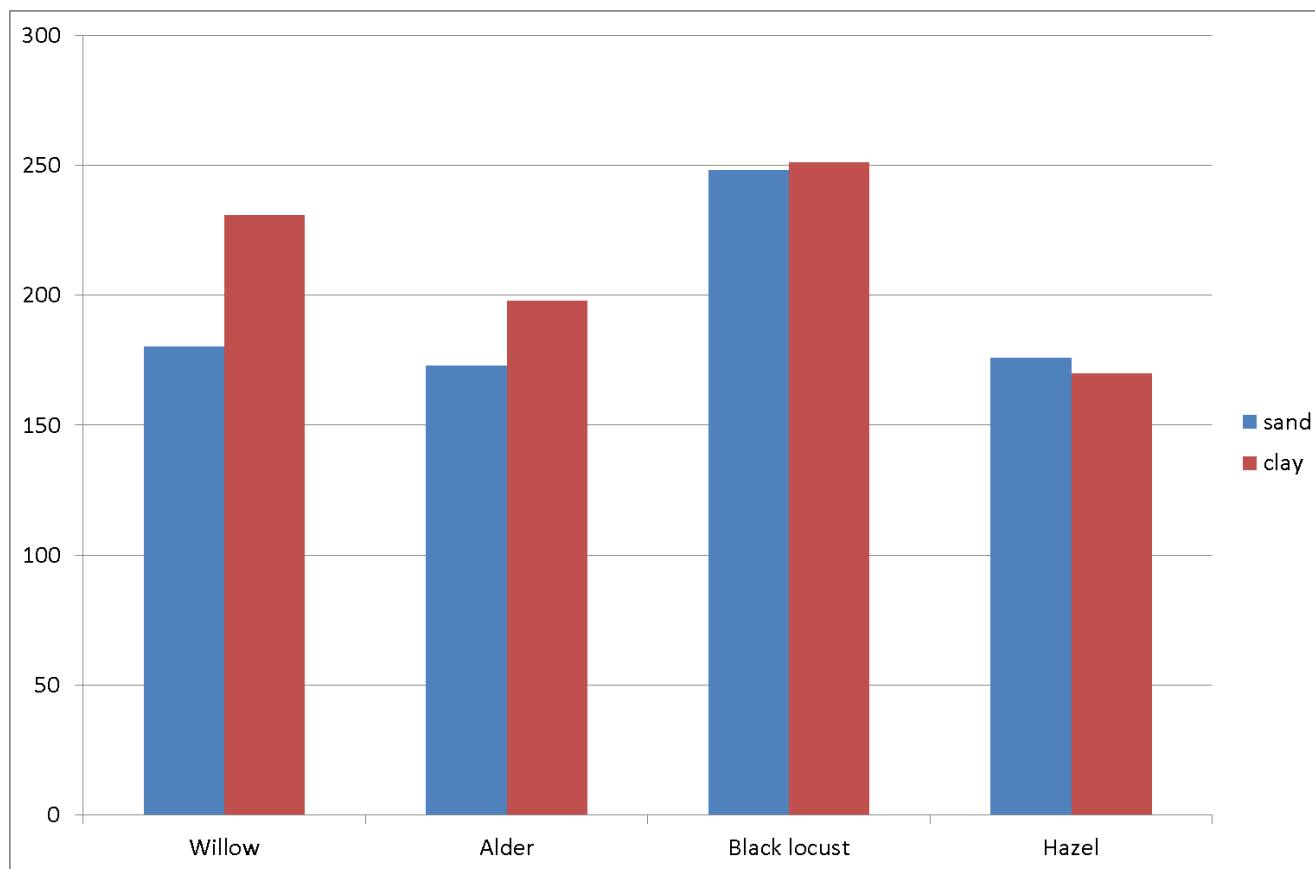
# Results harvesting Silage making



Look at [www.voederbomen.nl](http://www.voederbomen.nl)  
“Oogst” for film

# Results feeding value leaves

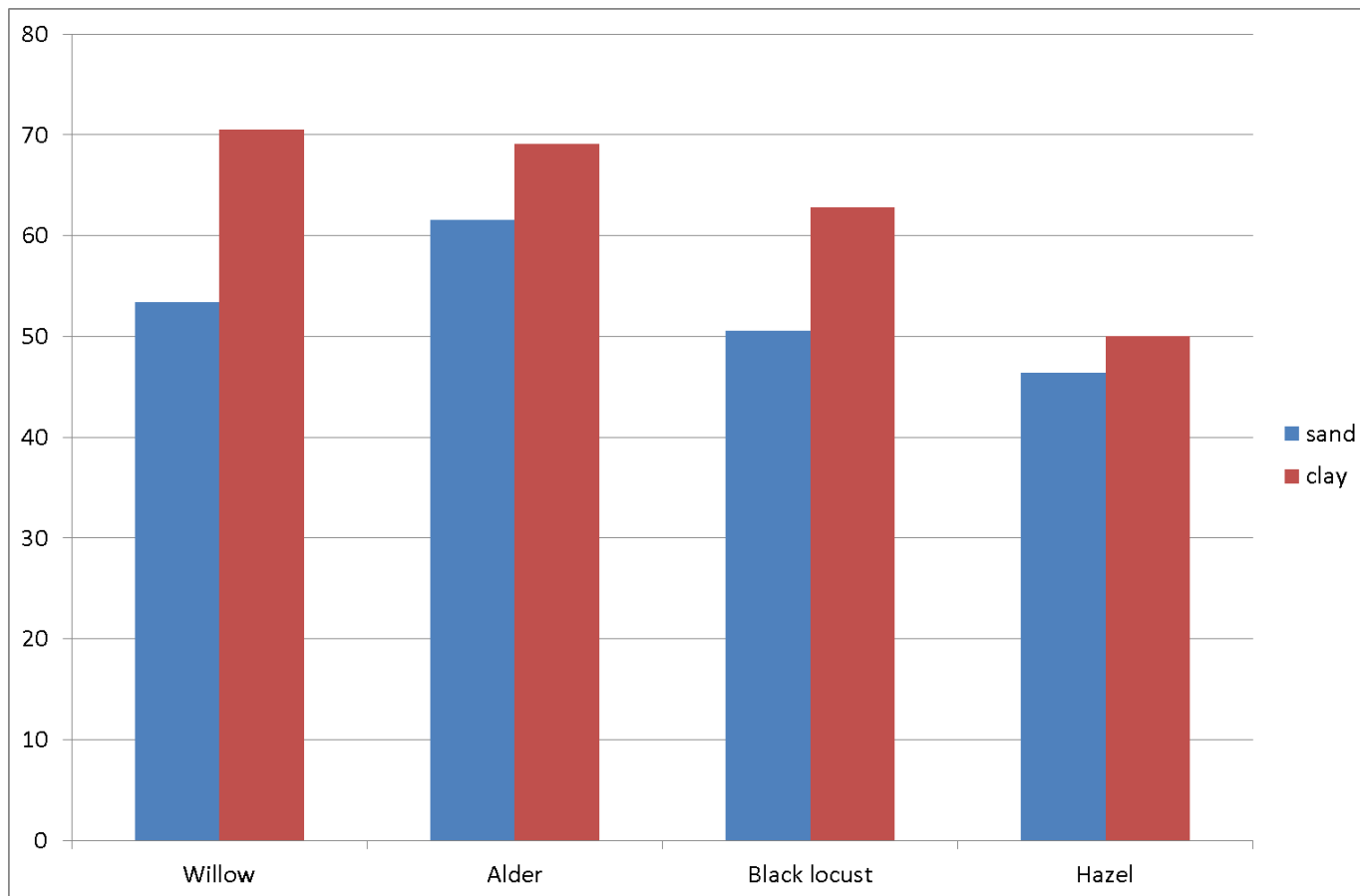
## Crude protein (g/kg DM)





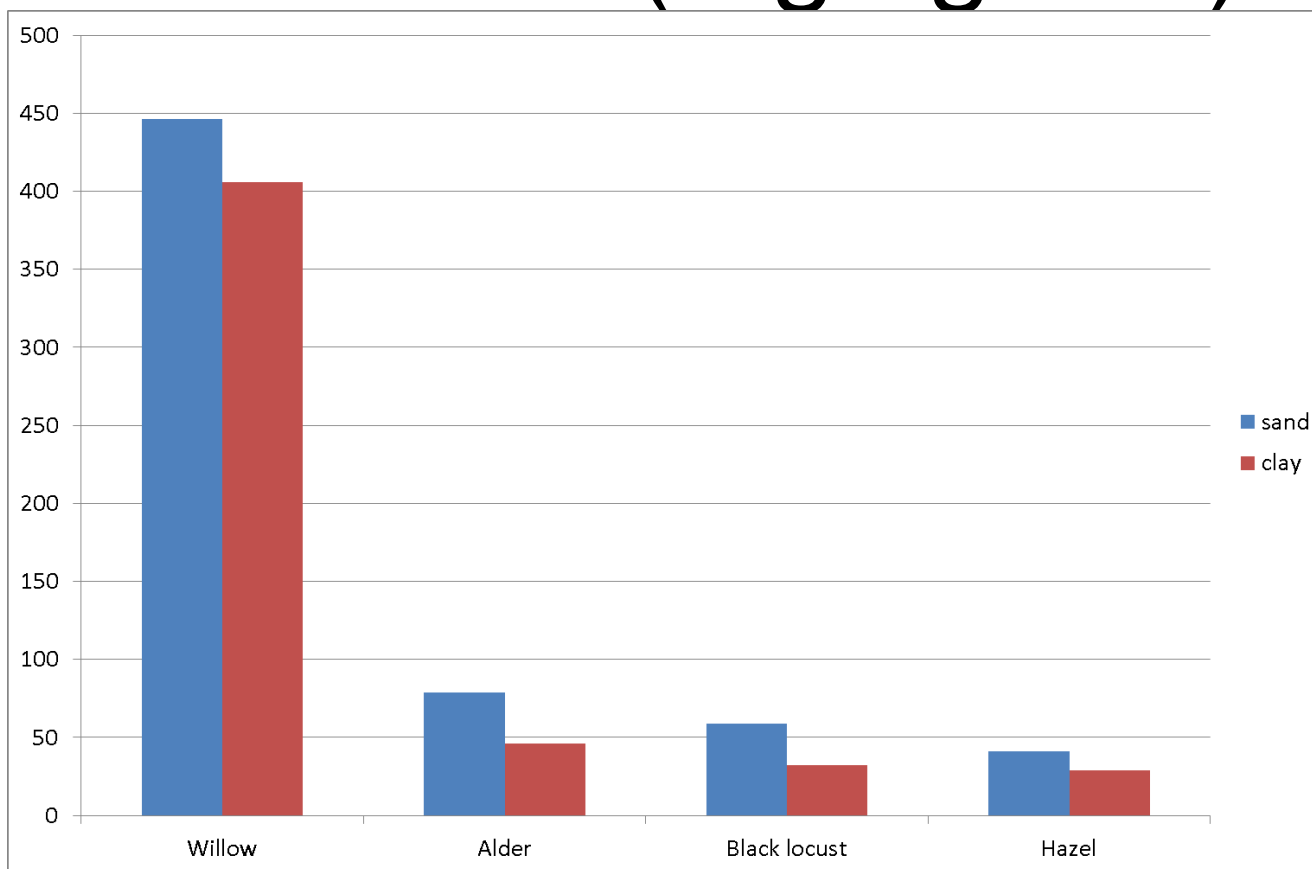
# Results feeding value leaves

## In-Vitro Digestibility (%)



# Results feeding value leaves

## Minerals (mg/kg DM)



# Results feeding value

- Crude protein in general good, black locust high
- In-vitro digestibility in general low, clay higher
- Effect of tannins? In vivo?
- Specific minerals of willow high



# Feed experiment

Before



Whole branches



Shredded

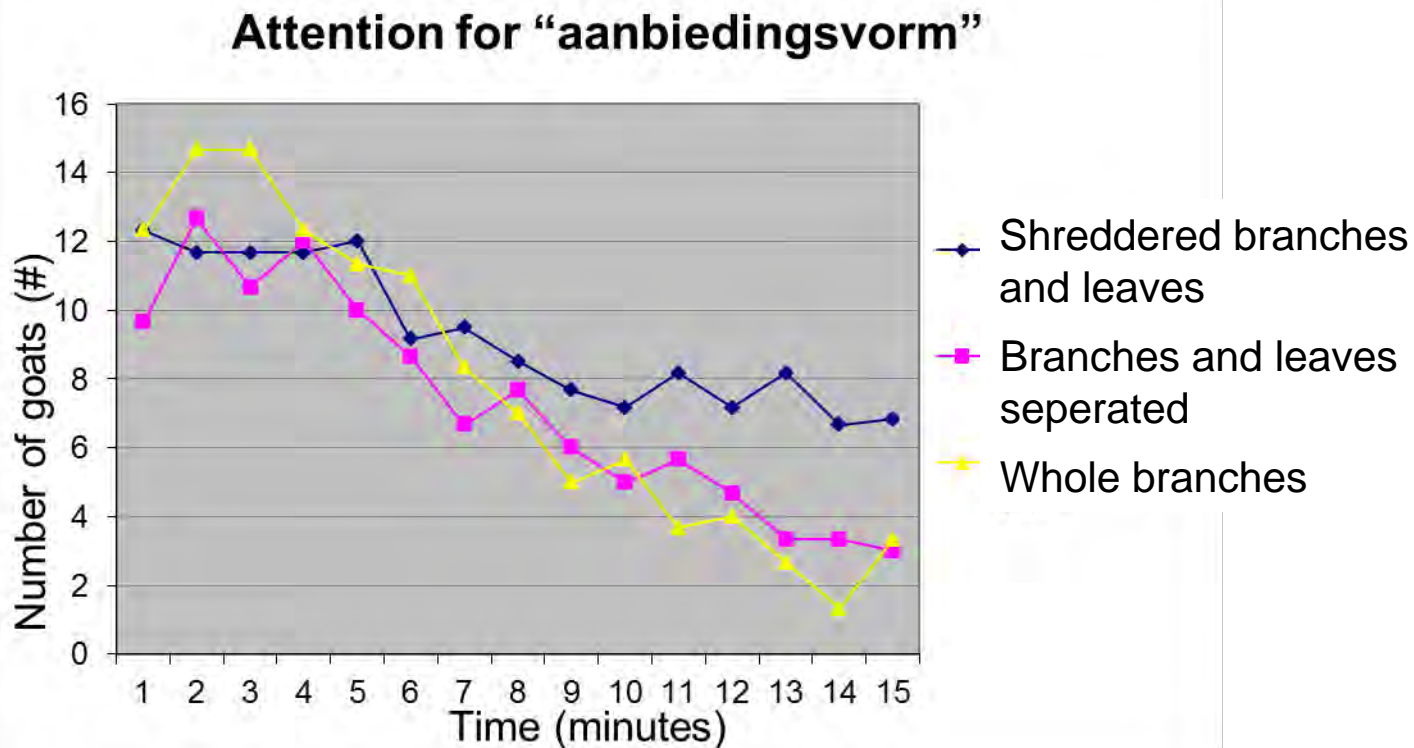
After



All leaves are eaten

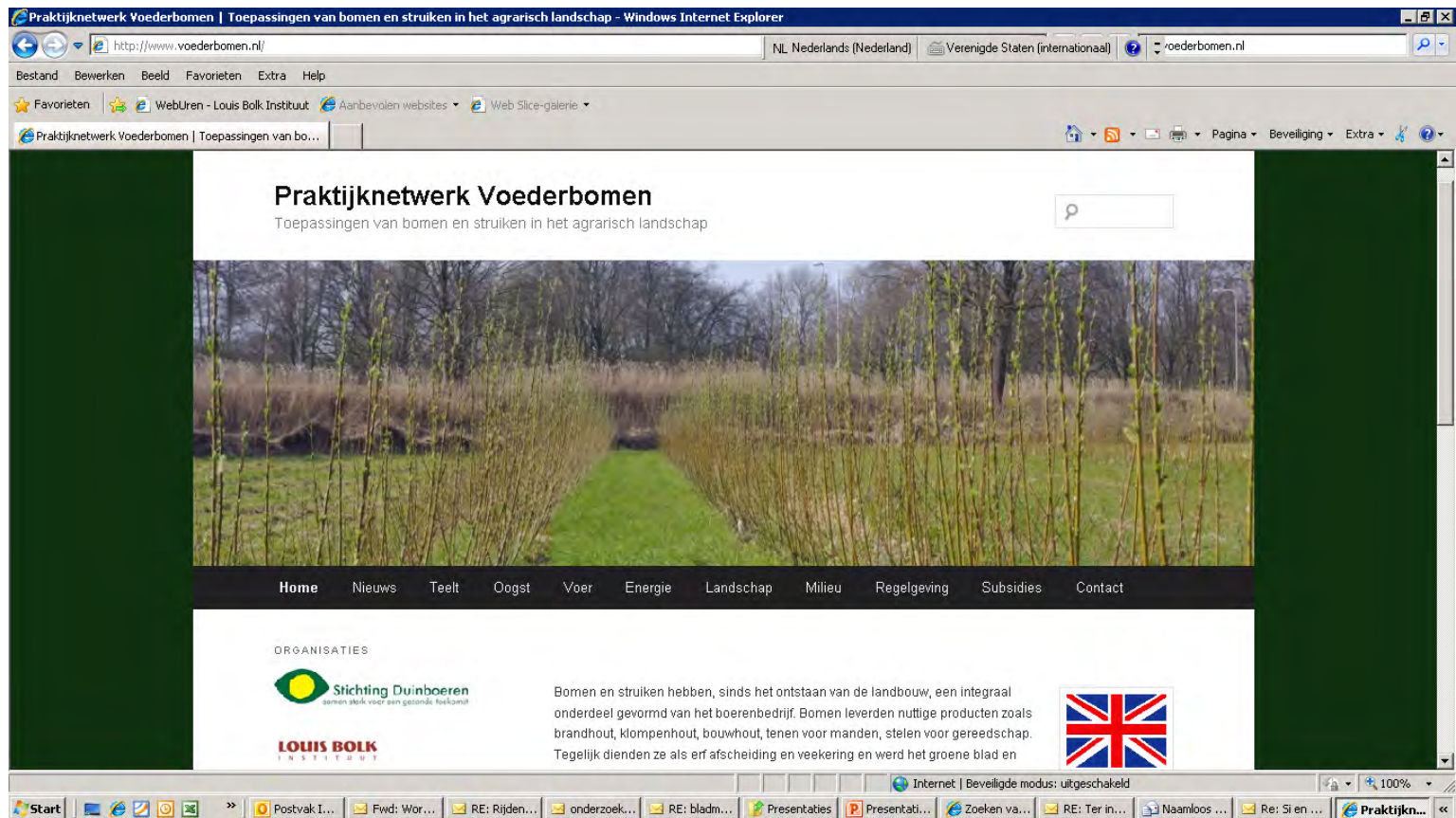


# “Aanbiedingsvorm”



# First results

For more information see  
[www.voederbomen.nl](http://www.voederbomen.nl)



# Thank you for your attention



## Questions??