

Introducing trees on Dutch dairy and poultry farms

Experiences and results from 2 farmers networks



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Fodder trees and multifunctional land use

- 2 Goat and 2 cow farms
- 3rd crop besides grass and maize
- Leaves and bark for food
- Wood for energy and litter in stables
- Nature and landscape improvement
- Environment and water quality (minerals)
- Economic aspects very important

Activities

- Excursions in NL and abroad
- First trees planted april 2011
- Willow, ash and other trees in strips, grass clover between strips
- Mechanical harvest
- Simple feed experiments
- Storage: silage in bales
- Knowledge exchange with Rotterdam zoo

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Harvesting - 1

seperating leaves from wood



Harvesting 2 Silage making



Look at www.voederbomen.nl
“Oogst” for movie

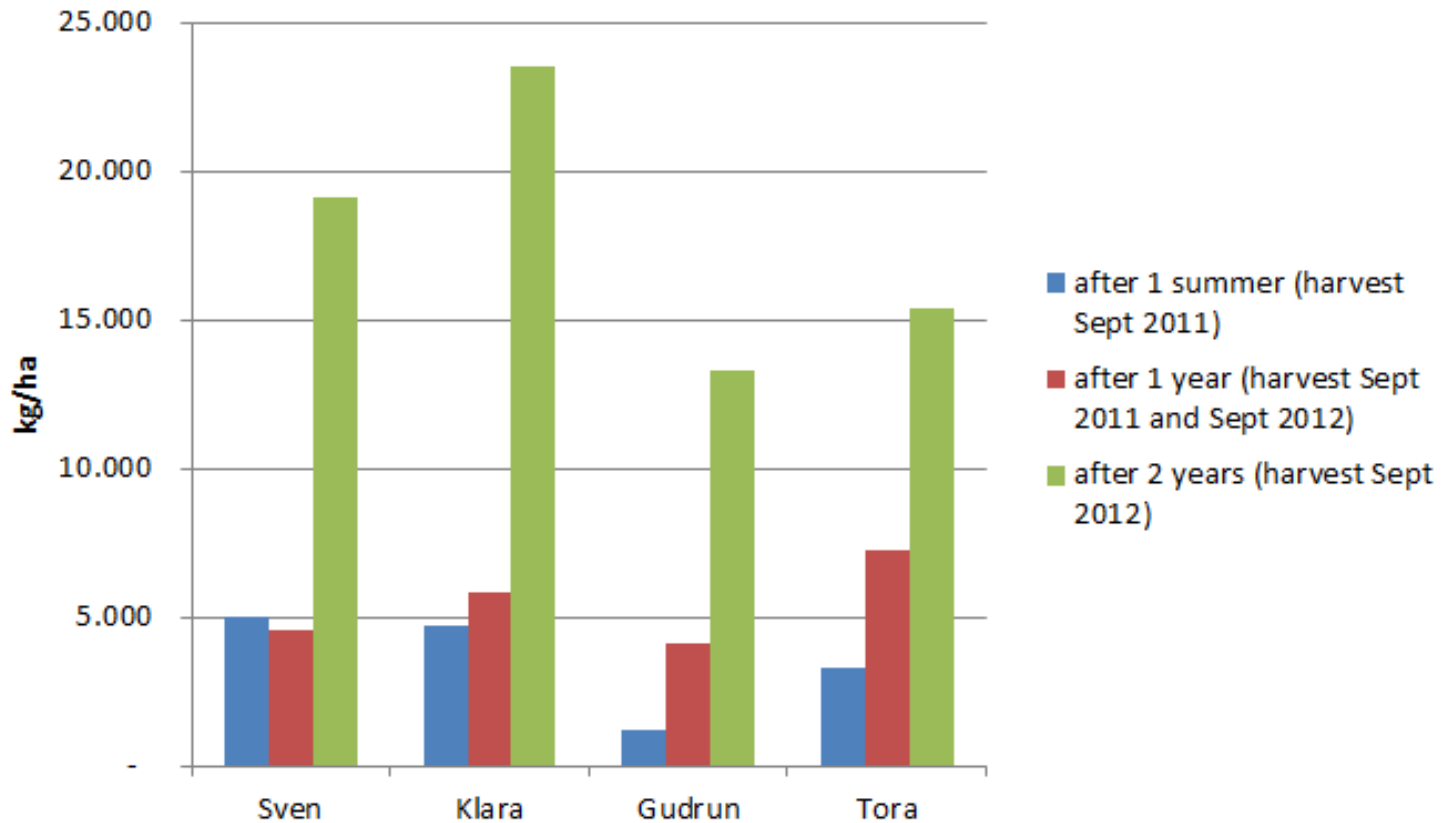
Harvesting - 3

ZOO FOOD CUTTING MACHINE



Results total yield

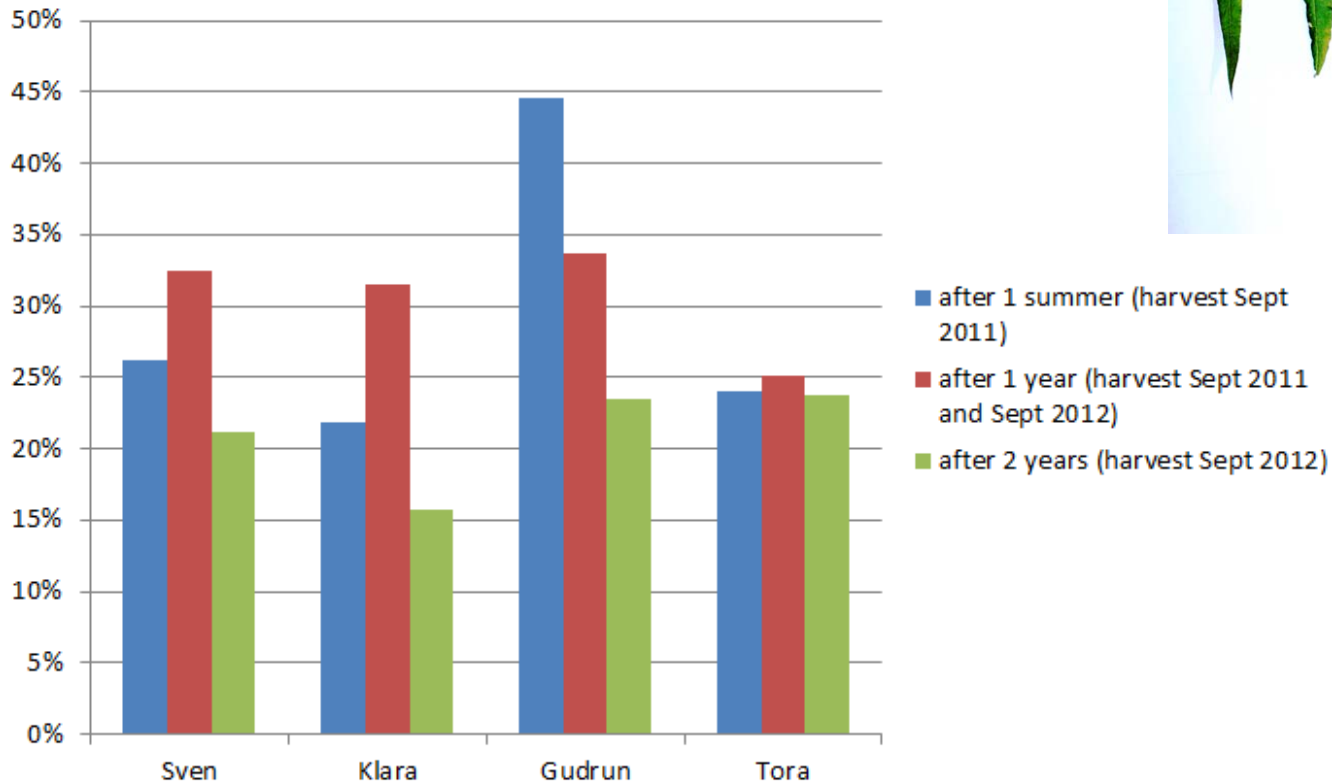
Dry matter yield willow clones



Results leaves

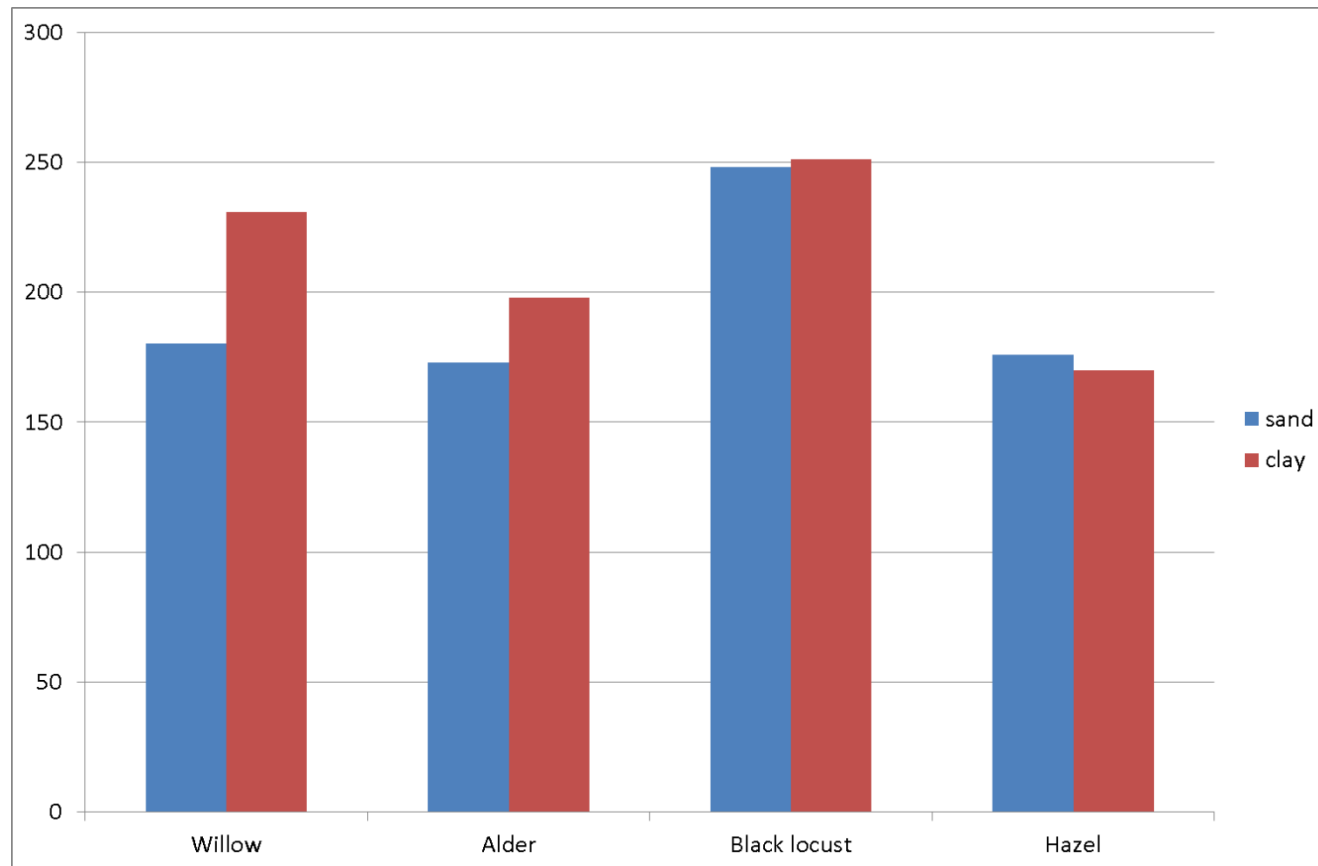


Leaf/wood ratio



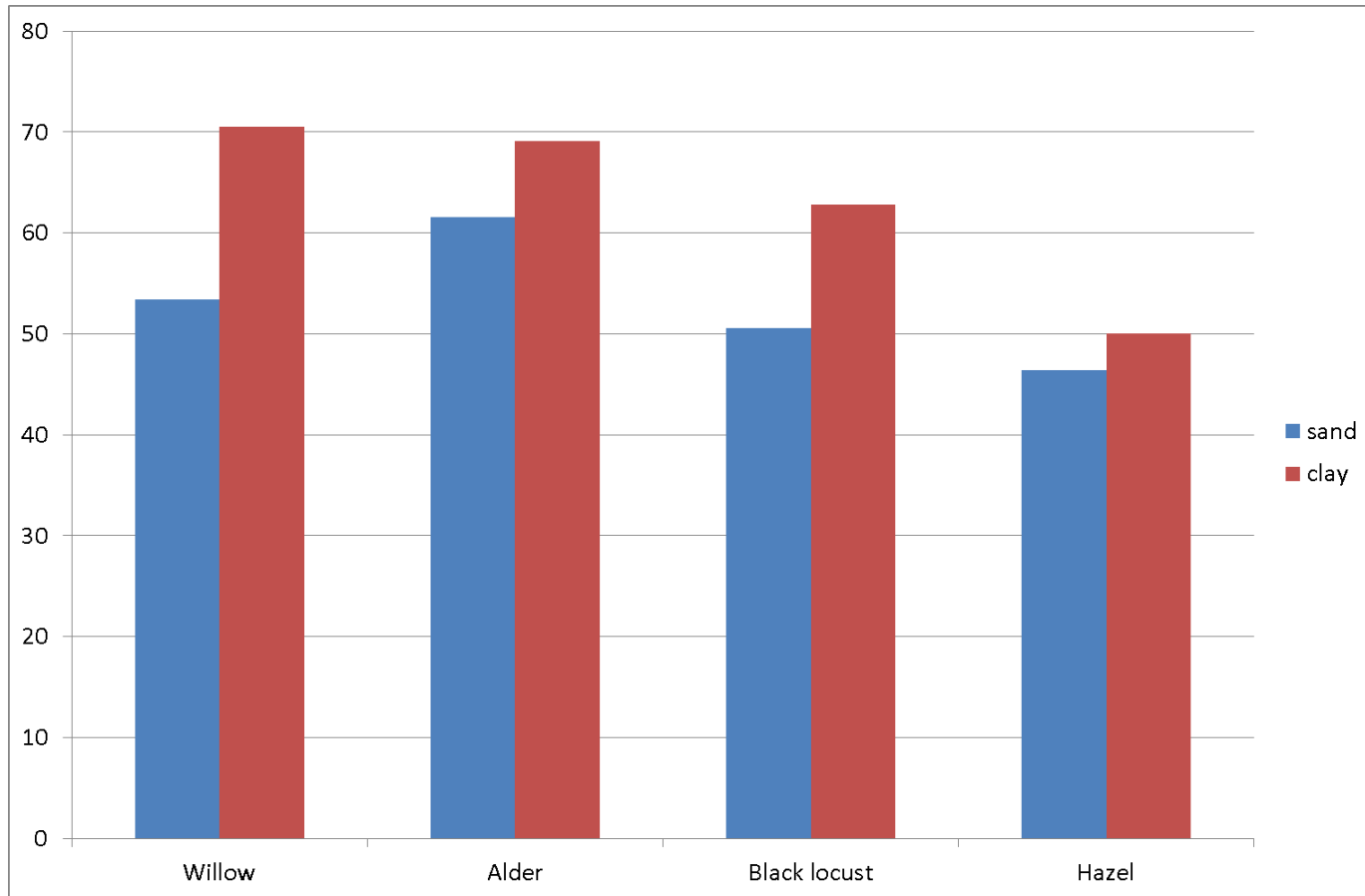
Results feeding value leaves

Crude protein (g/kg DM)

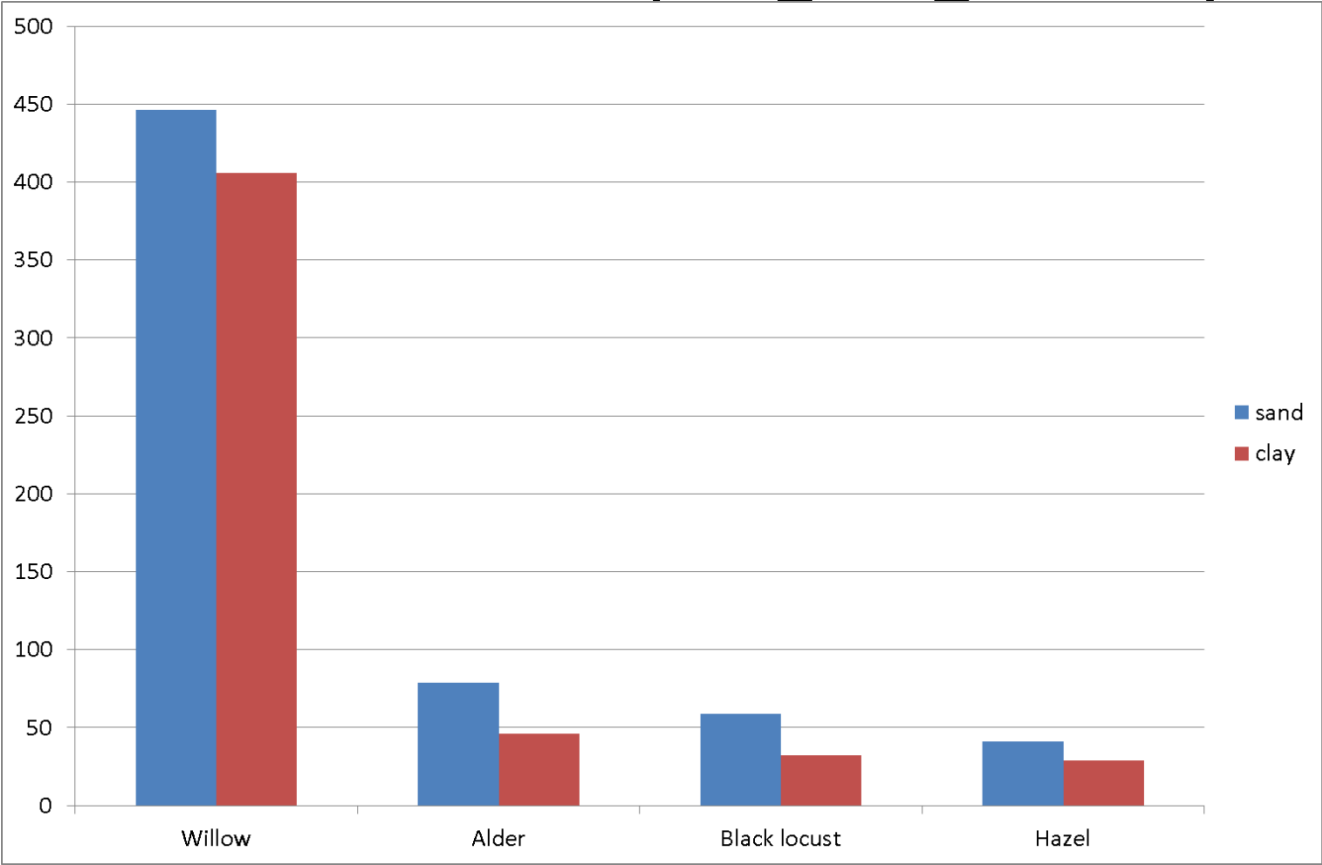


Results feeding value leaves

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

Trees for chickens

- Shelter in free range areas – make chickens feel more at ease, better use of range
- Keep away water birds (avian influenza)
- Wood for energy and litter in stables
- Fruits for human consumption
- Better distribution of manure minerals
- Nature and landscape
- Economic aspects very important

Activities

- Excursions to plantations
- Trees planted april 2013
- 2 farms willows, 4 farms fruit trees, 3 farms miscanthus

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Excursions



Fruit trees 1st results



- Nearly all trees survived
- Chickens didn't damage trees
- Irrigation necessary in dry periods

Willows 1st results



- Mechanical planting 15,000/ha
- First 3 months no chickens in it
- Mechanical weed management necessary

Miscanthus 1st results



- Grows slowly
- 1st year impossible to let chickens in
- Labour intensive because of high weed pressure

Thank you for your attention



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