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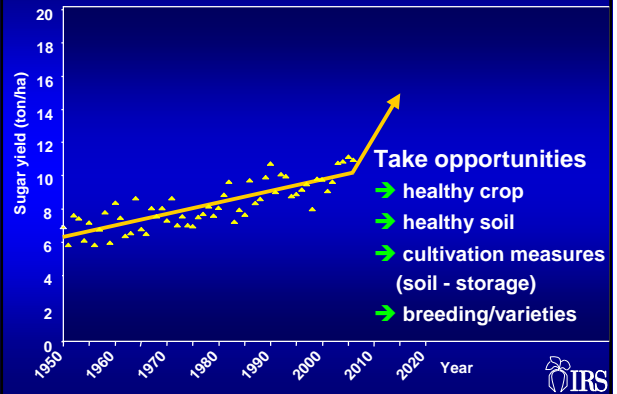


Improving competitiveness – Dutch approaches –

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Bram Hanse

07-01-2008

Sugar yield (The Netherlands)



3 x 15 Target

year 2015

Sugar yield 15 ton/ha

Cost-price 15 €/ton beet

Extra emphasis (1)

- ☀ Improving crop competitiveness
 - ☀ SUSY: Speeding Up Sugar Yield
 - ☀ LISSY: Low Input Sustainable Sugar Yield

Confucius (551 – 479 BC) about learning:



“Tell me, and I will forget.

Show me, and I may remember.

Involve me, and I will understand.”

Extra emphasis (2)

- ☀ Technology exchange
 - ☀ Best Practices Growers Groups
 - ☀ Learning and communication styles
 - ☀ Electronic registration, incl. bench-mark

Pairs study (SUSY)

- ☀ period 2006-2008 comparing top-class growers (high yield) with average growers
 - ➔ top-class: from the best 25% of a region (period 2000-2004)
 - ➔ average: difference in sugar yield with a plus farm of 1500 kg sugar per hectare or more



Position of the 52 participating farms



• distribution of the 52 participating farms across the Netherlands



Pairs study (SUSY)

- ☀ project details
 - farmers keep a cultivation and rainfall registration and fill in a cultivation survey
 - extensive field research carried out by IRS, sugar industry (Suiker Unie), Blgg and Plant Research International



Pairs study (SUSY)

- ☀ Field research (1)
 - soil sampling (fertility, nematodes, rhizomania, soil resistance for rhizoctonia)
 - soil penetration resistance
 - investigating seedbed, seedbed preparation depth, drilling depth, emergence, plant counts, seed spacing, seed placement
 - water infiltration capacity in the soil profile and air content in the topsoil



Pairs study (SUSY)

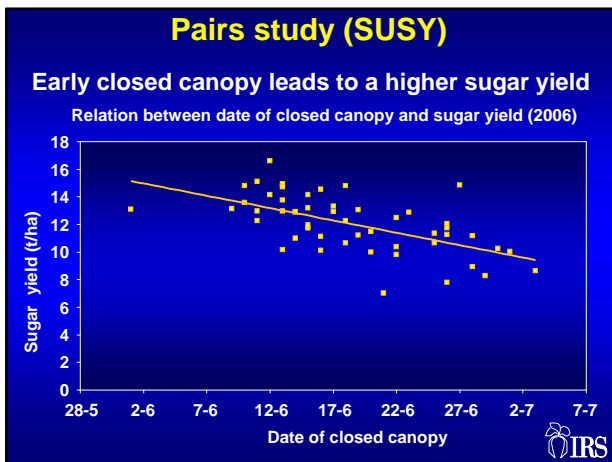
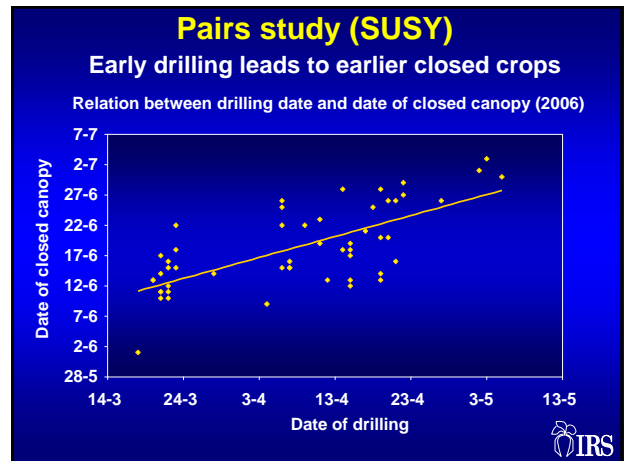
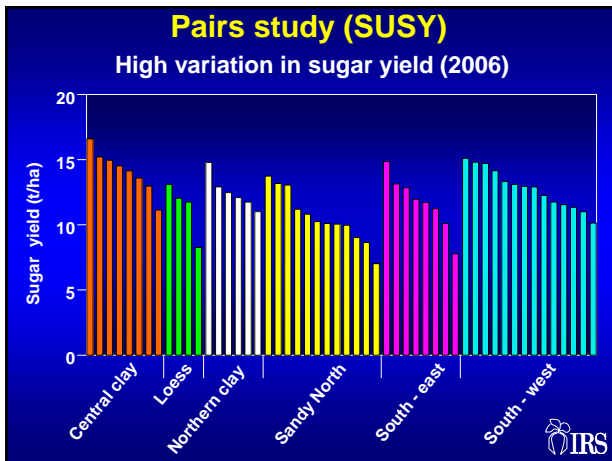
- ☀ Field research (2)
 - date of canopy closing
 - weed, bolter and leaf disease observations
 - characteristics of the soil profile (including maximum rooting depth)
 - harvest losses



Pairs study (SUSY)

Some results of 2006 and 2007





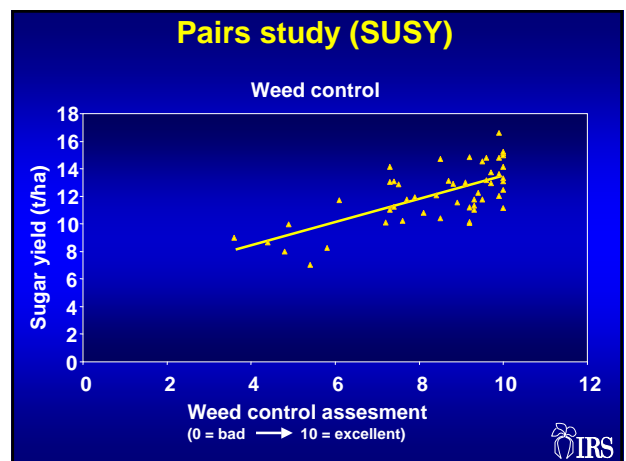
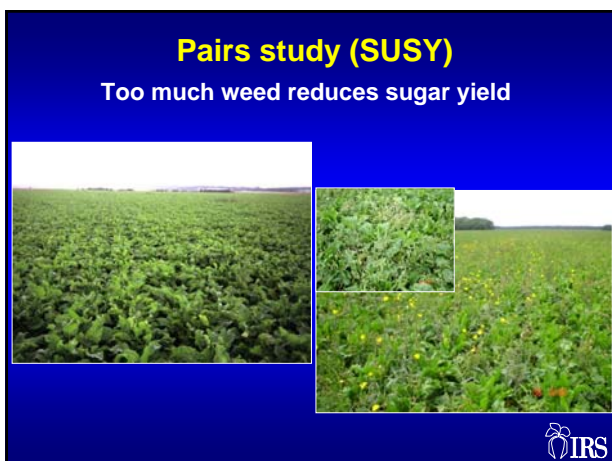
Pairs study (SUSY)

Heterodera schachtii infestation


	Fields infested	not aware
<u>2006</u>	50%	42%
<u>2007</u>	62%	59%

*The infestation classification is not known by many growers. 90% of the surveyed growers did not sample the soil directly preceding the beet crop.

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Pairs study (SUSY)
No leaf disease control reduces sugar yield





control

no control





Pairs study (SUSY)
Soil structure damage (2006)


Pairs study (SUSY)
Drought stress (2006)




Pairs study (SUSY)
Wetness (2007)





Pairs study (SUSY)
Harvest losses




4,75% total loss

12% total loss




Pairs study (SUSY)
(very) uneven seedbed

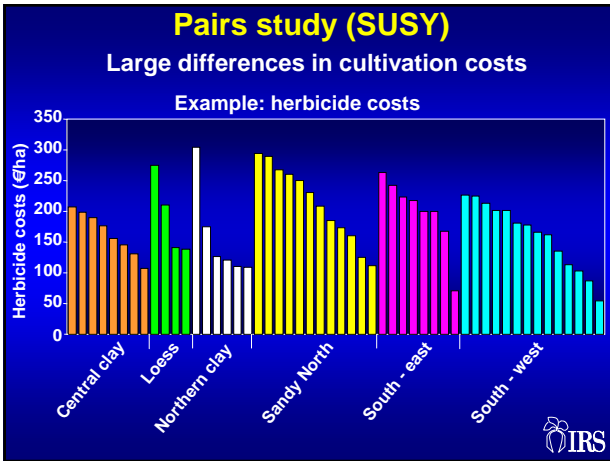


overtopping 20%

even seedbed

overtopping 8,5%





Pairs study (SUSY)

Conclusion 2006

**Sugar yield of 15 t/ha
and a cost price of 15 €/ton
is possible!!**

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Pairs study (SUSY)
SUSY observes further for you in 2008!

- higher sugar yield
- lower cost
- better competitiveness

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