

'Farm economics of HOLL Oilseed rape in Northern Europe'

GCIRC Nyon 2013
A Williams



MONSANTO

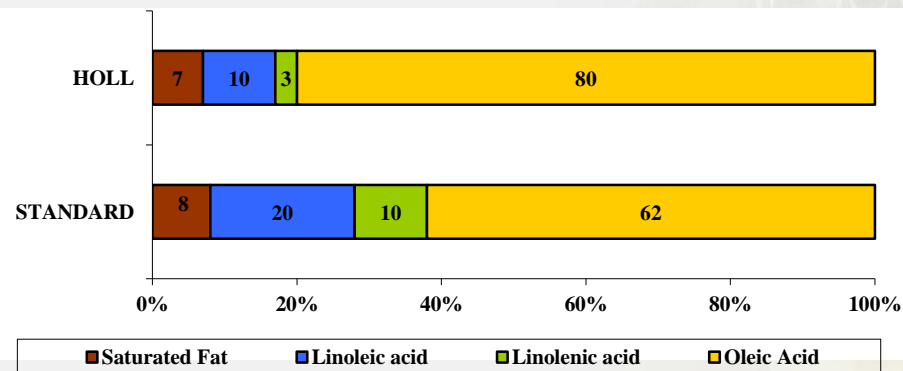
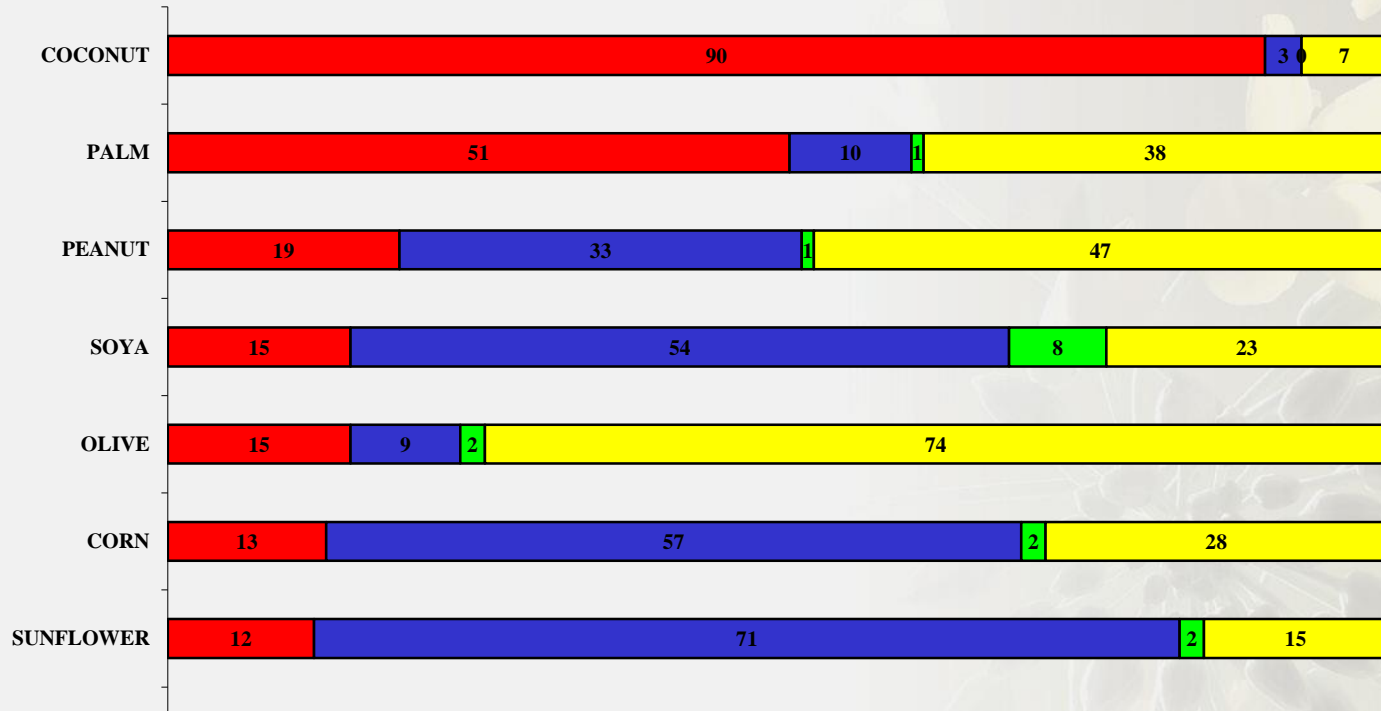


Contents

- The WOSR HOLL concept
- Trait
- Market Development
- Grower uptake
- Farmer Economics
- Summary
- The future?

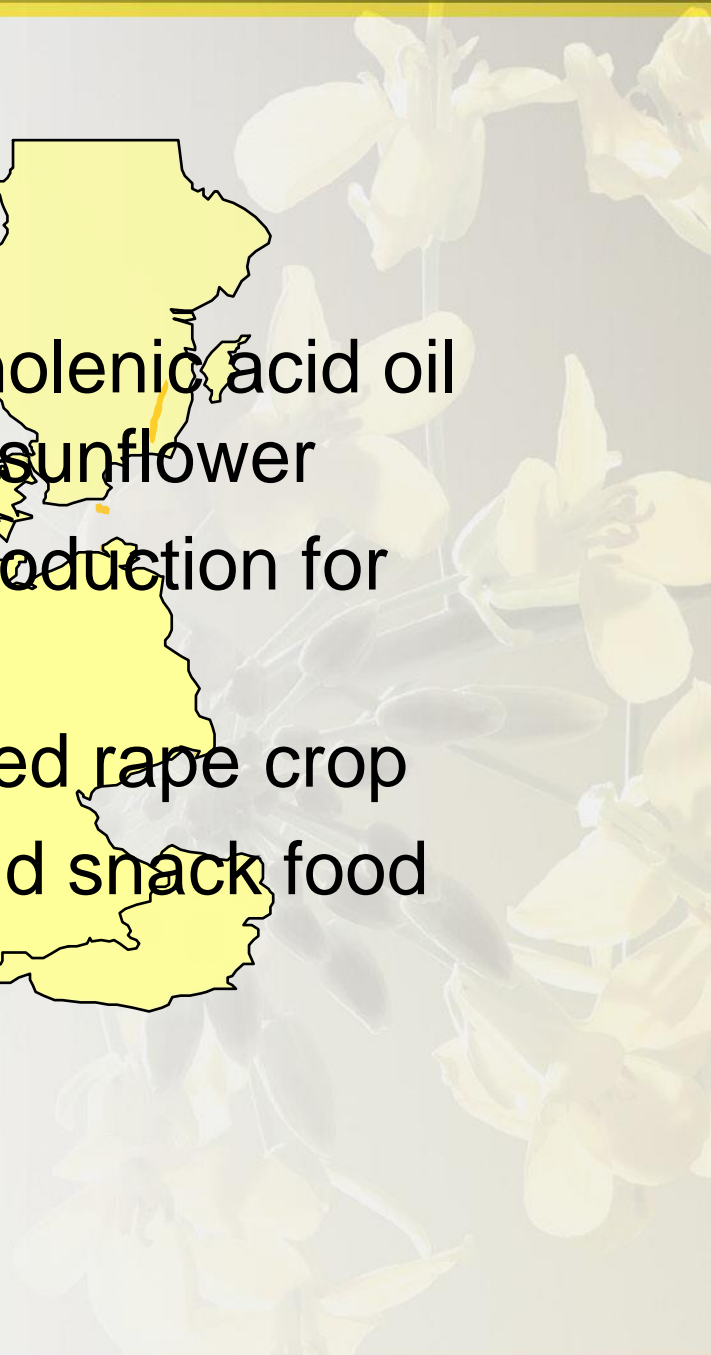
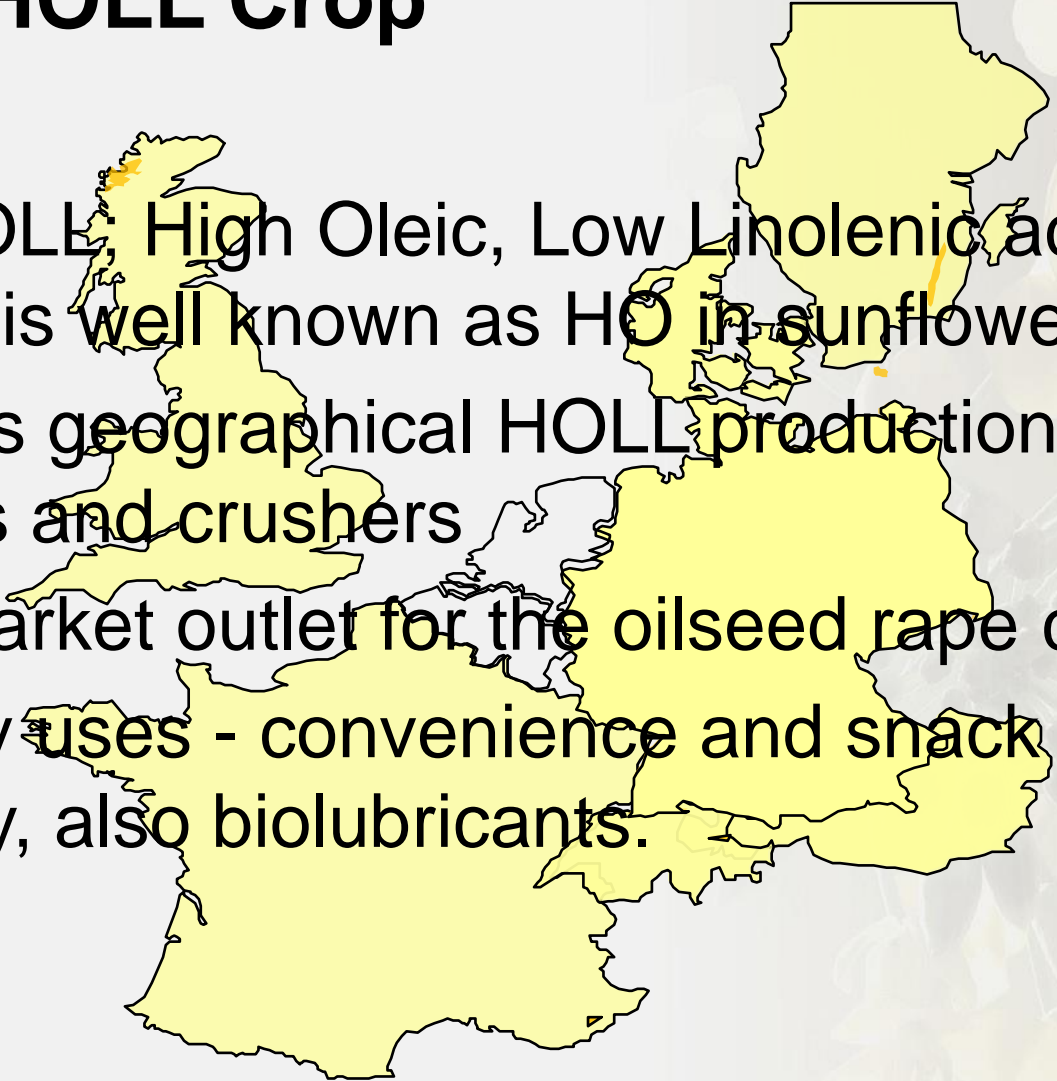


WOSR – High Oleic, Low Linolenic (HOLL) Profile



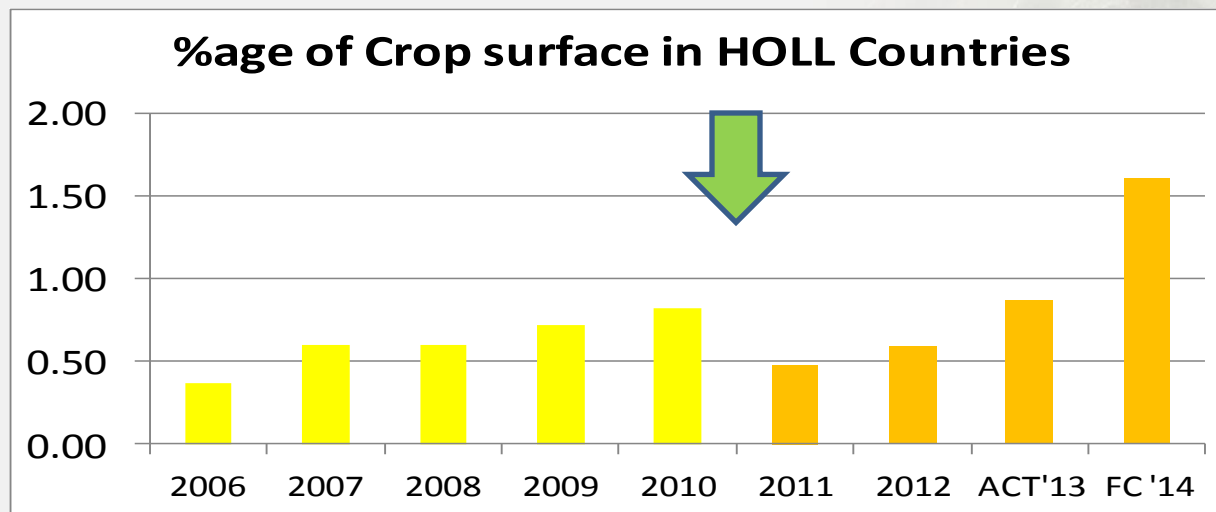
WOSR HOLL Crop

- The HOLL: High Oleic, Low Linolenic acid oil profile, is well known as HO in sunflower
- Extends geographical HOLL production for farmers and crushers
- New market outlet for the oilseed rape crop
- Primary uses - convenience and snack food industry, also biolubricants.



WOSR – HOLL Market Area Development

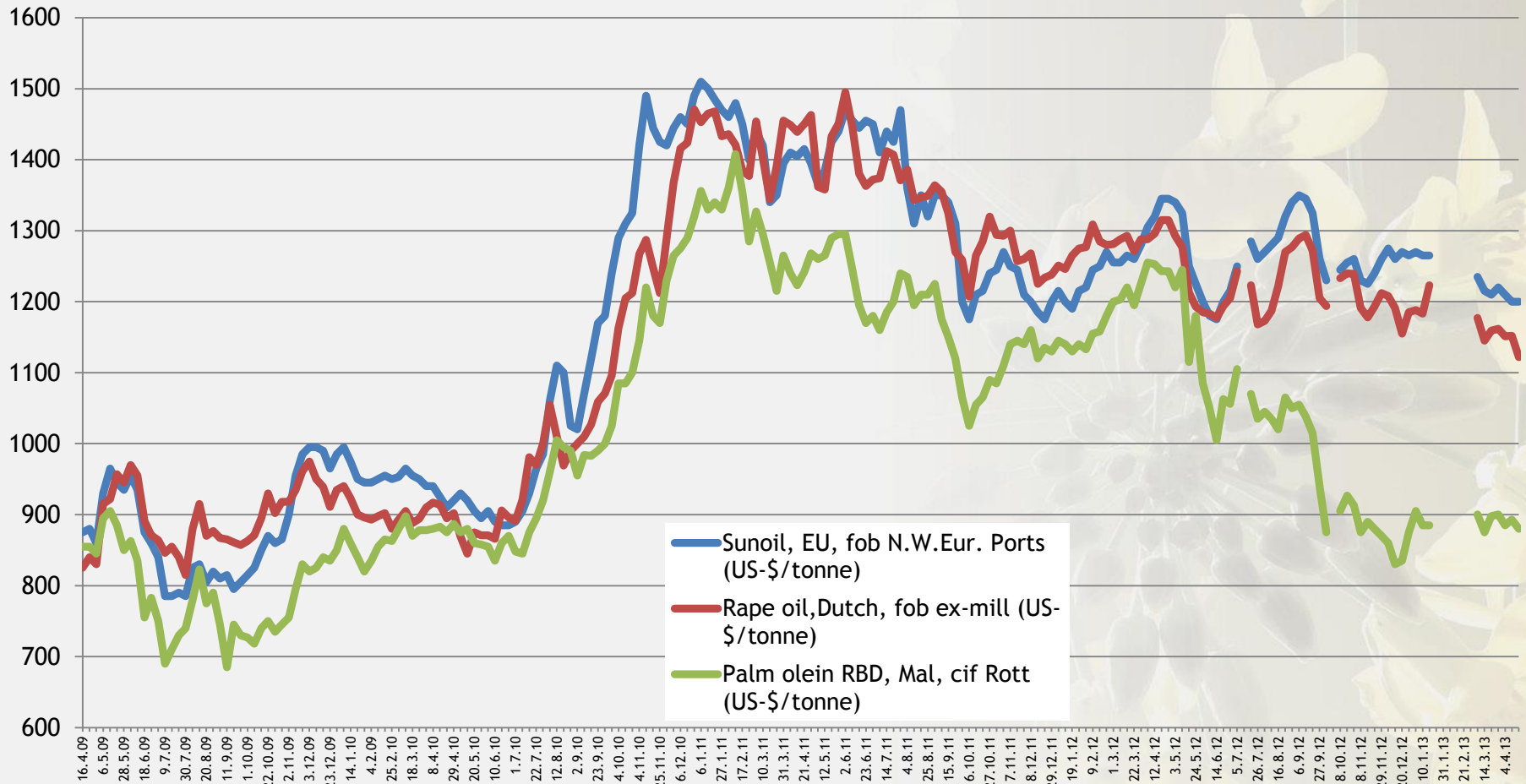
- Initially slow development
 - Selective launch OP varieties in 2006
 - Farmer area below 2,000ha
- Yield impact of trait integration
- Intensive breeding efforts by 2 partner companies
 - First hybrid launch in 2010
 - Commercial production in the Nordic countries, France, Germany, Austria and the UK.



Harvest Year

Source: MON:DSV data

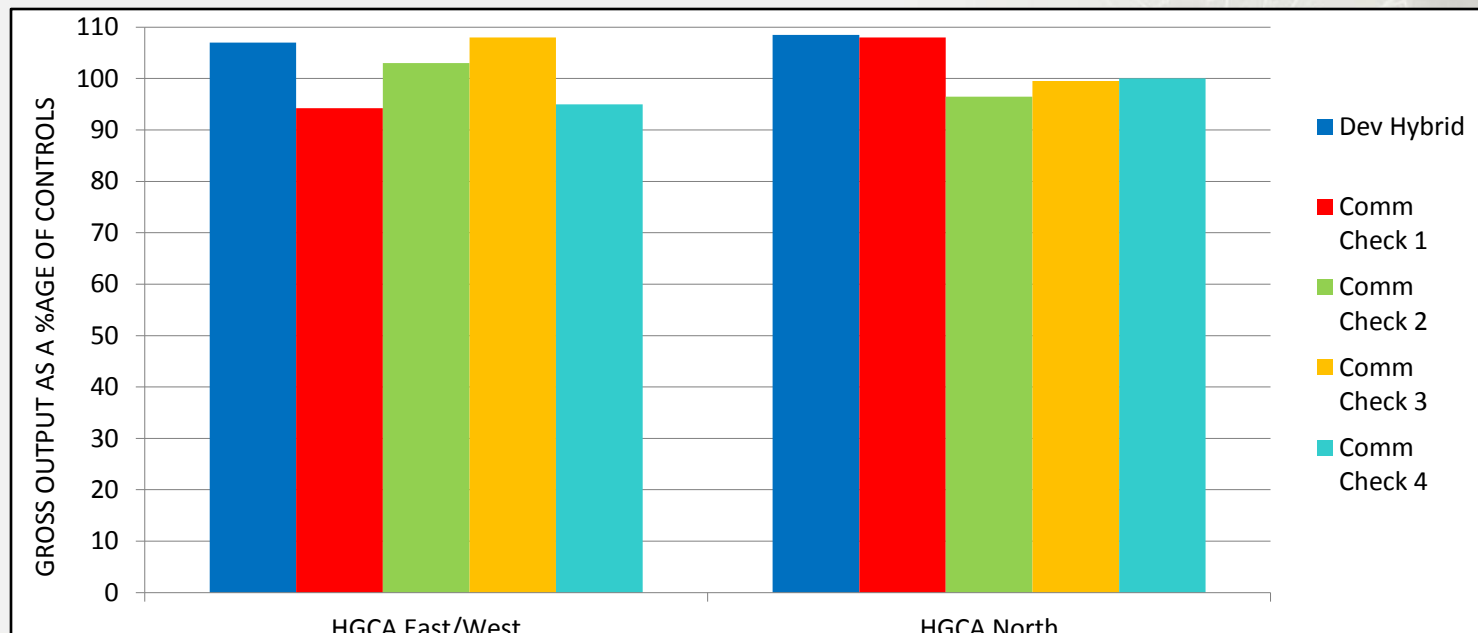
Oil Market Volatility



Grower Uptake

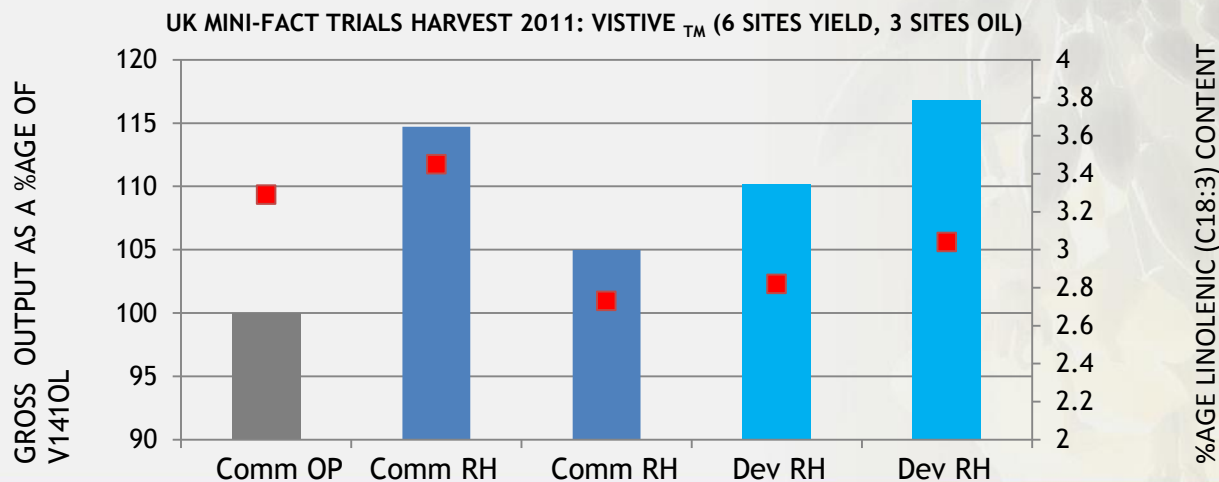
- Initial concern over field management
- Yield performance is major limit to farmer
- New development hybrids demonstrate yield parity to the best non-HOLL varieties

WOSR HOLL variety performance - Regional NL1 Gross Output 2012
(UK Official Trials series) As % Controls (4 Recommended List official Commercial Checks)

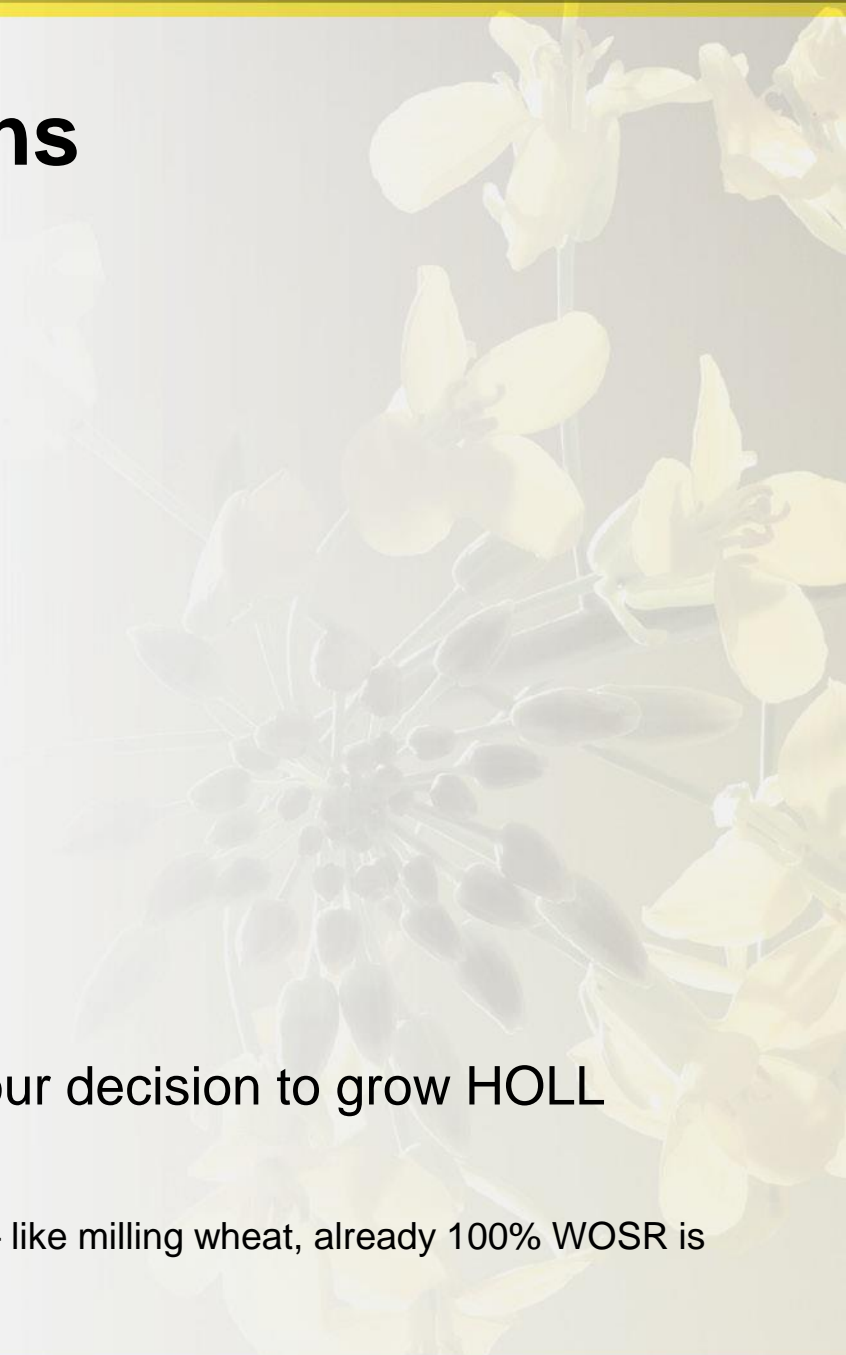


Farmer Survey

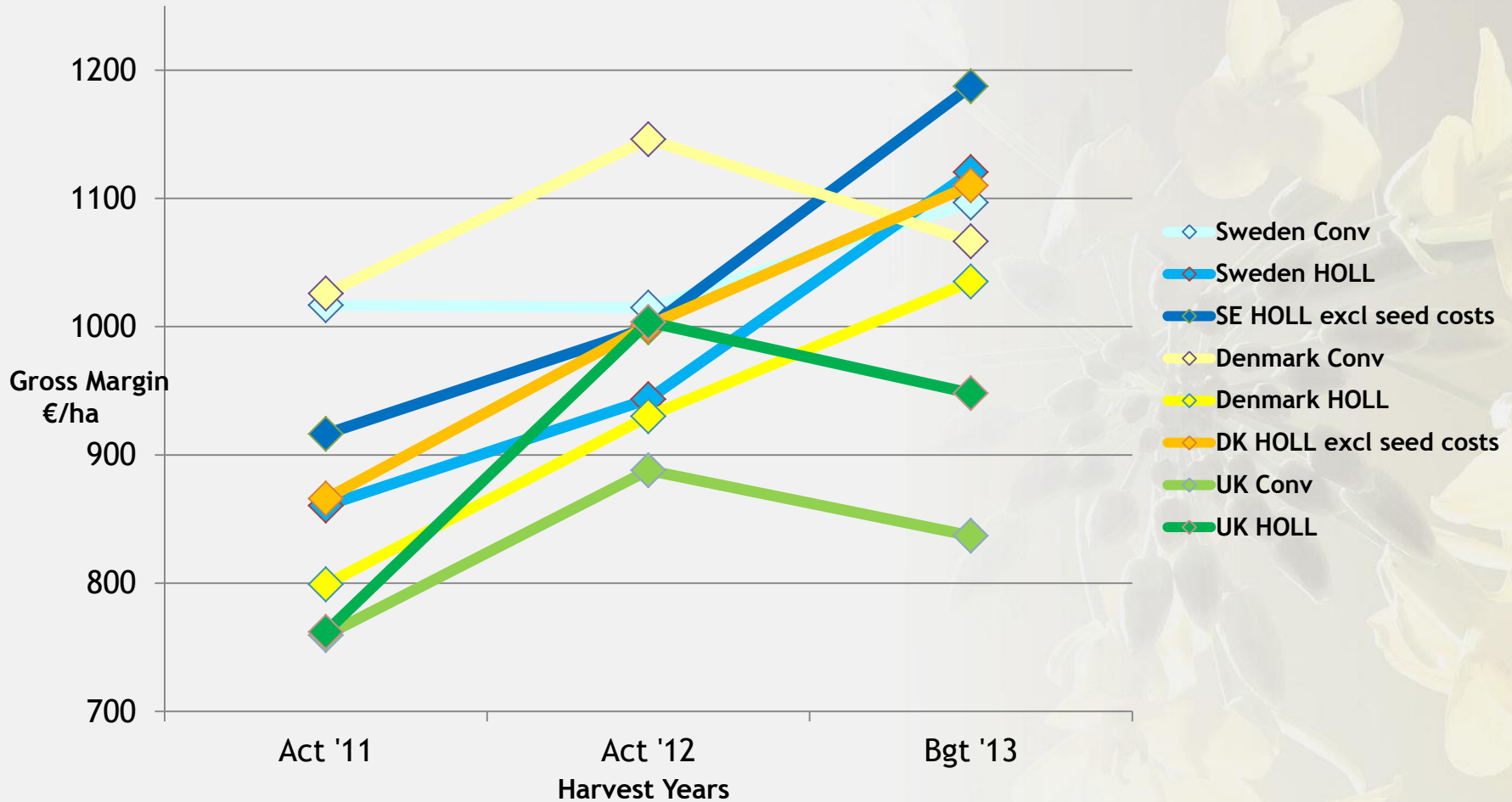
- Sample Countries: Denmark, Sweden, UK
- Sample size: 30:30:30
- Sample origin: Farmers on the Vistive™ QA Database
- Questions: Input Costs, Output Value, Margin
- Establishment Costs: No difference HOLL: Conventional
- Variable Costs: No difference HOLL: Conventional



Farmer Survey Questions

- Survey Questions & Responses:
 - Why are you growing HOLL WOSR?:
 - Interested in different market for the crop
 - Potential to make more money
 - Secure premium + market
 - Food chain input
 - Know the end user
 - Can be the future crop
 - Which factors made you hesitate?:
 - Yield vs. Conventional
 - Isolation and weed control
 - Specific storage
 - Movement off farm
 - With yield parity how will this affect your decision to grow HOLL WOSR in the future?:
 - 80% - grow an increased area
 - 20% - stay the same (rotation, spread risk – like milling wheat, already 100% WOSR is HOLL, sustainability of the market change)
- 

On Farm Economics



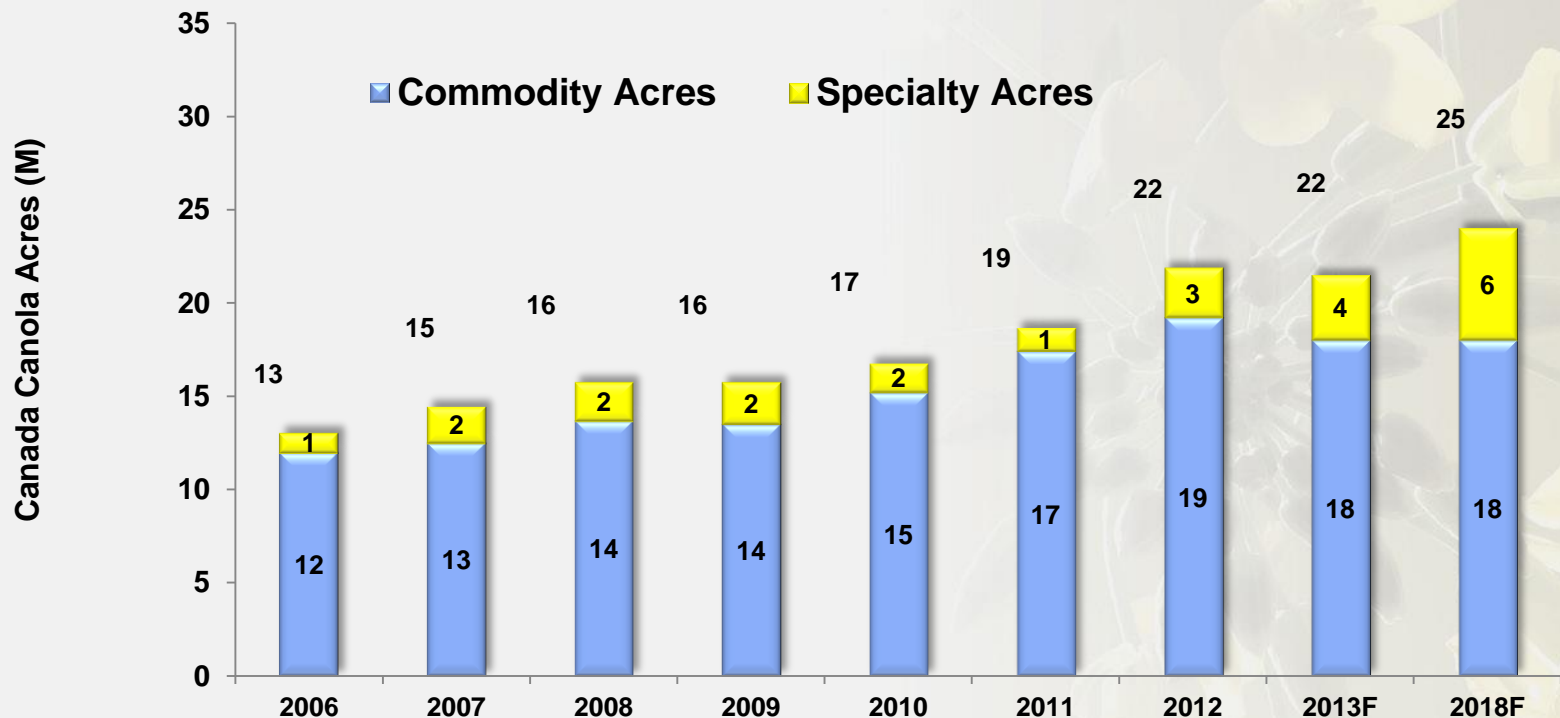
Gross Margin after Establishment costs before Overhead costs

Summary

- Barriers to entry
 - yield shortfall
 - Field & Post-harvest management questions
- Yield Shortfall
 - Field differential < trials differential
 - Initial Crusher/Merchant offers compensated
 - Hybrid introduction raised HOLL WOSR yields
- Field & Post-harvest Management
 - Field Management is 'Best Practice'
 - Similarity to Milling wheat
 - Entry + Uptake influences by storage – farm or merchant
 - Crusher: Merchant relationship important
- Potential for future growth



Global Markets – Canada – could this be a future vision for HOLL WOSR in Europe????



Thank you



MONSANTO

