

Market Opportunities Initiative



GRDC Malting barley market visit to China

15 – 28 August, 2010



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Trade Development

GRDC project



'Coordinate Marketing Intelligence Gathering and Market Visits'

- National project for barley
- The Department of Agriculture and Food WA (DAFWA) managed the project but included all States
- The main component was a market visit to China
- The aim was to provide an opportunity to better understand market requirements and ensure long-term competitiveness of Australia's barley
- Assist national breeding and research efforts so that future varieties will satisfy the marketplace
- Accurate pre-competitive signals are available for strategic development (breeding goals) and new developments (quality testing and or research)

Australian Delegation

Project Manager:

1. Anne Wilkins

Department of Agriculture and Food WA

Pre-breeders and barley chemists:

2. Dr Meredith Wilkes

University of Sydney, NSW

3. Dr Suong Cu

University of Adelaide, SA

4. Stefan Harasymow

Department of Agriculture and Food WA

5. Dr Chengdao Li

Department of Agriculture and Food WA

Breeders:

6. David Moody

InterGrain Pty Ltd, WA

7. Dr Reg Lance

InterGrain Pty Ltd, WA

8. Dr Amanda Box

University of Adelaide, SA

9. Dr Stewart Coventry

University of Adelaide, SA



Market visit

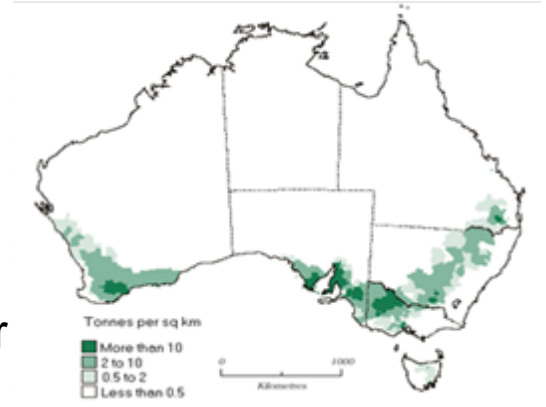


Visited:
3 maltsters: 50% of market
4 breweries: 50% of market
2 R & D centres:
- Zhejiang University
- Hangzhou barley breeding centre

Key Findings

Supply

- Need consistent and stable supply
- Over the past 2 years in particular, both quality and quantity have been an issue
- Prefer to use M1 but FAQ has increased recently
- Many companies said: too many new releases over the past 4-5 years
- Only need one new release every couple of years
- Need regular supply of at least two varieties: Gardiner and Baudin most popular currently in China
- Need a minimum of 200 - 300,000 tonnes of a variety
- Don't need a "silver bullet"



Key Findings

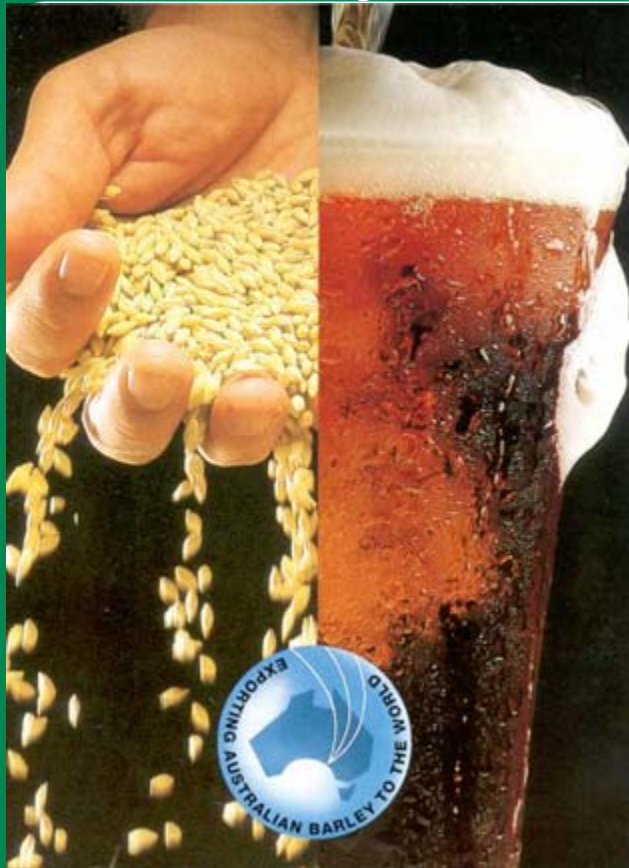


Protein

- Australian barley protein is too low
- Many received barley below 10.0%
- Want barley between 10 -13%
Currently GTA standard is 9 -12%
and WA is 9.5 – 12.5% (M1)
- Driven by US and Canadian specifications
- Adjuncts: 30-55%



Key Findings



Flavour

- Testing at the malt, wort and beer stages
- Use HPLC test and congress mash
- Many companies are researching flavour
- Australian barley flavour is too light, harsh, astringent and grassy
- Canadian barley is more pure and sweet
- Tsingtao Brewery have agreed to a joint research project with Australia to determine the traits
- Want stable flavour: sweet and balanced
- Lower odd flavours



Key Findings



Information

- Need details on malting barley specifications per variety to present to industry
- BA trademark is poorly recognised in China
- Need yearly seminars in China by 'Australian Barley Association' i.e. EU and Canada do this
- "Australian Barley Association" needs to invite Chinese customers to Australia e.g. EU and Canada do this
- Need to continue market visits to end users i.e. continue this type of GRDC project



Key Findings

Standard specifications

- Need consistent specifications for both growers and grains marketers across Australia
- Need same standards every year
- Need to increase both the minimum and maximum protein levels
- BA and MBITBC must include traits that reflect flavour:
 - Soluble nitrogen specification
 - Total malt nitrogen
 - Kolbach Index
 - FAN
 - Extract
 - Diastatic Power
 - Viscosity
- MBITBC need to broaden point system for traits and scores as it currently doesn't reflect full range of market requirements by Chinese customers



NIR analysis



Recommendations



Growers

- Consistent supply
- Higher protein
- Information packs on protein specifications should be developed and delivered to growers and agronomist
- R & D should be conducted in the field on agronomic packages to support barley protein levels



Recommendations



Industry – short/medium term

- The export malting barley protein receival standards need to change; particularly in WA
- Develop industry recommendations to GTA and GIWA standards committee to increase protein specifications
- Regular international market visits to end users; similar to this project, on an ongoing basis

Recommendations



Industry – long term

- New barley varieties bred to achieve higher protein through agronomic and rotation management to ensure consistent quality of supply
- Barley varieties that enhance end-product flavour may also help the industry to remain highly competitive in the future



Recommendations

End users

- Annual seminars on updates of latest varieties, research and performances of barley, malt and beer. Receive feedback on market experience
- Further scientific R & D on influence of barley on end product flavour. End users want to enhance flavour performance potential of malt
- Develop strategic end-user collaboration in R&D on the influence of barley on beer flavour



Conclusions



- Stable supply
- Higher protein
- Improve flavour – strategic end-user collaboration; fund joint research with Tsingtao Brewery
- Improve information to and from industry
- Standard malting barley specifications

Thank you

Questions

