# Australian Eastern Region Crop Quality

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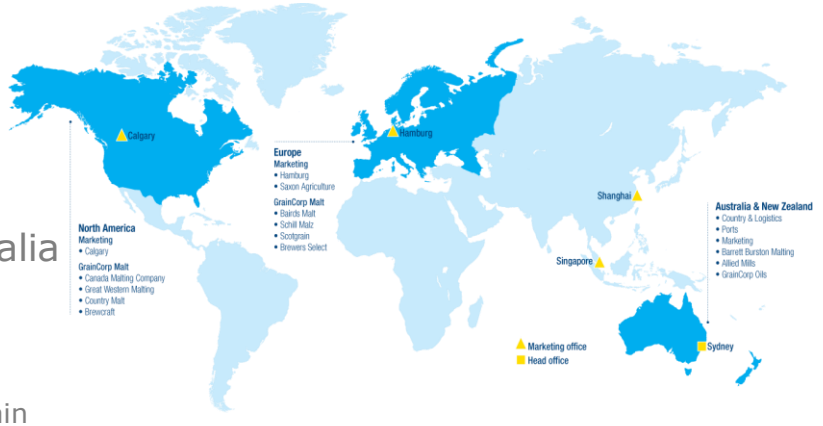
GrainCorp

# GrainCorp

GrainCorp is a leading global agribusiness with a diverse range of grain storage, handling, marketing & processing operations

- **Storage & Logistics**:
  - 300 country receival & storage sites
  - 20 MT storage capacity
  - Serving up to 10,000 growers each year
  - 4 laboratories
  - Handle 90% bulk exports from eastern Australia
  - 7 bulk export grain terminals
  - 16 MT bulk elevation capacity
  - 5,000 TPH ship loading capacity (at one of the main ports)
  - 2 container packing terminals
- **Marketing**:
  - Largest exporter of grain from eastern Australia
  - Over 6 MT of grain is exported to Asia, Middle East, Africa & Europe each year
  - Presence in Australia, North America, Europe & Asia
- **Processing**:
  - GrainCorp Malt
  - GrainCorp Oils
  - Allied Mills (60% ownership)



# Eastern Australia Growing Season 2013/14

## QLD

- Generally hot & dry
- Early start
- Above average autumn rainfall, followed by drier winter
- Dry harvest, high protein

## NSW

- Low rain ➔ lower soil moisture
- Early winter rain helped establish crops
- Dry harvest in north; protein levels above average

## VIC

- Average-above average rain in autumn & winter
- Rain delays early part of harvest in some areas
- Remainder was hot and dry, with high falling numbers

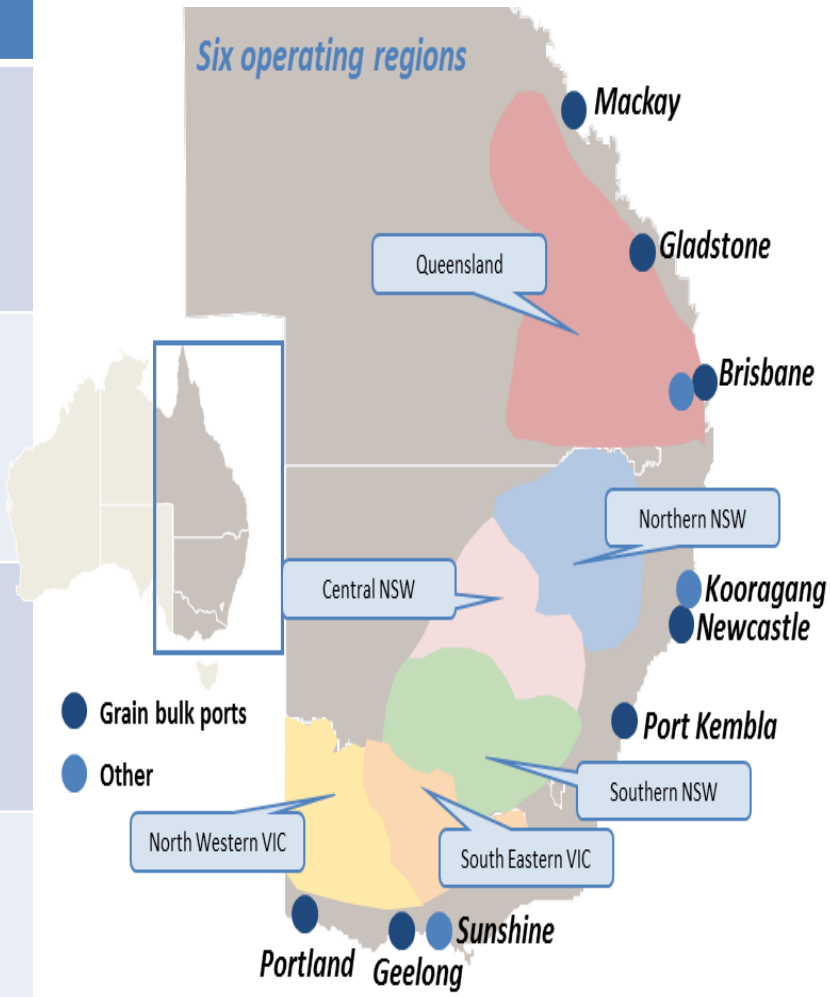
# Eastern Australia Wheat Quality 2013/14

- High test weights
- Higher than average grain size
- Low screenings & low moisture contents
- Protein is above average in Queensland & northern NSW
- Excellent milling extraction rates & low flour ash values
- Gluten index >90 for all samples
- Generally high water absorption

**APH**: good dough strength & farinograph stability & is typical of the class
**AH, APW, ASW**: normal dough strength & balanced dough properties

# Wheat Varieties Received into Eastern Australia* (QLD/NSW/VIC)

| Class | Varieties |
|---|---|
| **Prime Hard (APH)** | Baxter, Gregory, Wedgetail, Spitfire, Sunvale |
| **Hard (AH)** | Baxter, Gregory, Janz, Kord, Scout, Spitfire, Sunvale, Yitpi |
| **Premium White (APW)** | Gregory, Janz, Livingstone, Spitfire, Strzelecki, Sunvale, Yitpi |
| **Durum (AD)** | Bellaroi, Caparoi, Jandaroi, Wollaroi |




*receival into each class is dependent on the protein content & the maximum classification

# Wheat/Flour Quality
# Eastern Australia (QLD/NSW/VIC)

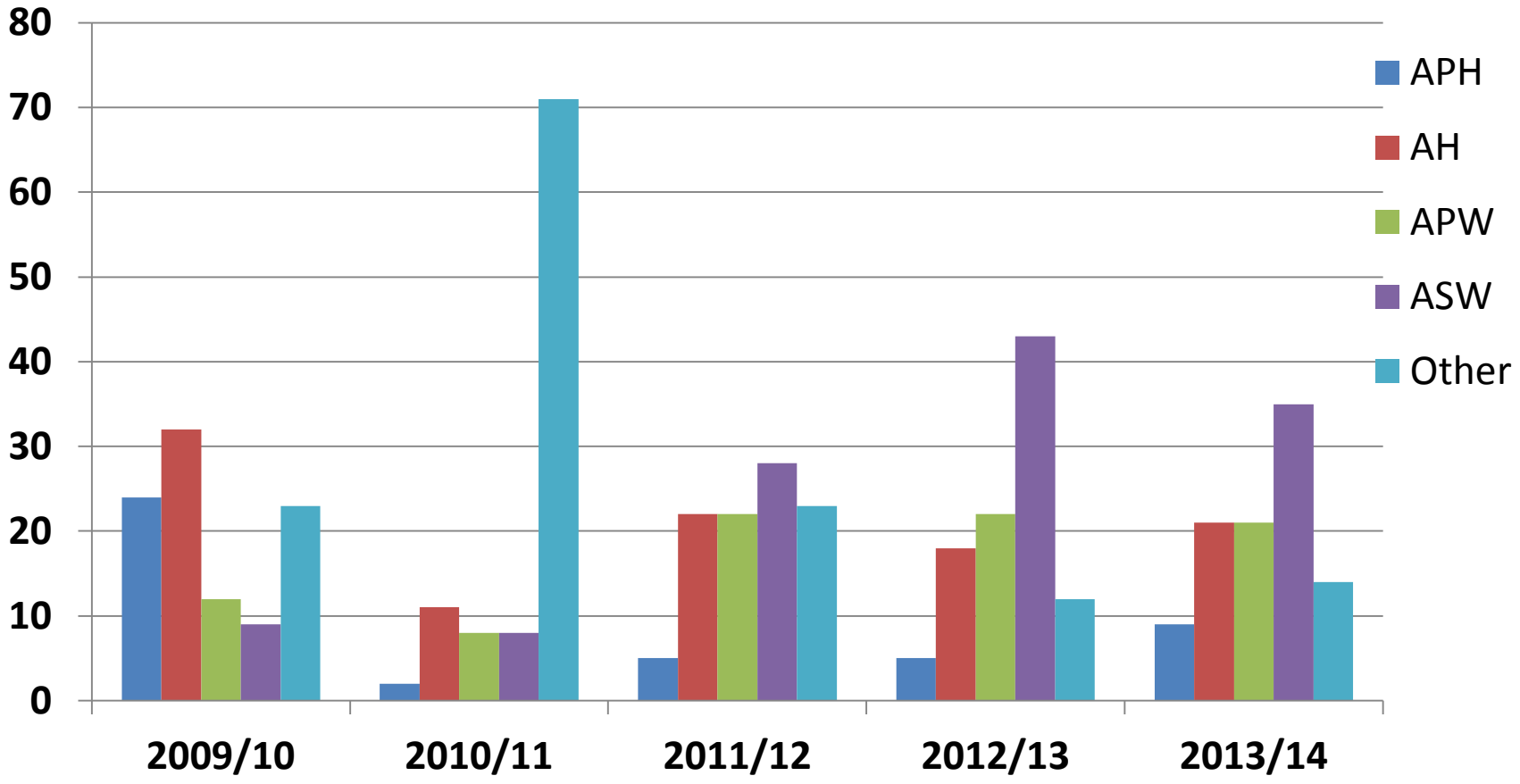
GrainCorp

| Class | Units | APH | AH | APW | ASW | ADR |
|---|---|---|---|---|---|---|
| **Test Weight** | Kg/hl | 81.5 | 82.2 | 82.7 | 83.0 | 80.3 |
| **Protein**** | % | 13.8 | 12.0 | 10.9 | 9.5 | 14.3 |
| **Moisture** | % | 9.7 | 9.8 | 9.9 | 9.9 | 9.9 |
| **Falling #** | Sec | 448 | 439 | 437 | 413 | 547 |
| **Screenings** | % | 2.7 | 2.5 | 2.3 | 2.1 | 3.1 |
| **Flour Wet Gluten** | % | 35.5 | 31.7 | 27.4 | 22.9 | 33.4* |
| **Gluten Index** | - | 94 | 95 | 96 | 96 | 76 |
| **Stability** | Min | >15 | 8.8 | 8.2 | 5.2 | - |
| **Extensibility-45** | Cm | 21.8 | 20.1 | 18.3 | 16.2 | - |
| **Minolta-L** | - | 92.8 | 93.0 | 93.2 | 93.3 | 85.7 |
| **Minolta-b** | - | 10.8 | 10.8 | 10.4 | 10.3 | 34.0 |

*Semolina wet gluten
**11% moisture basis

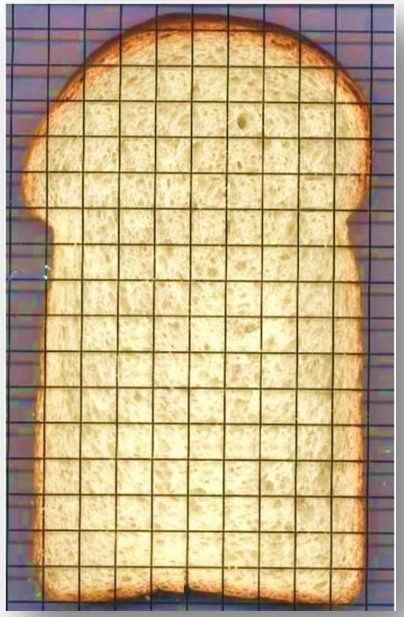
# Eastern Australian Wheat by Grade (%)

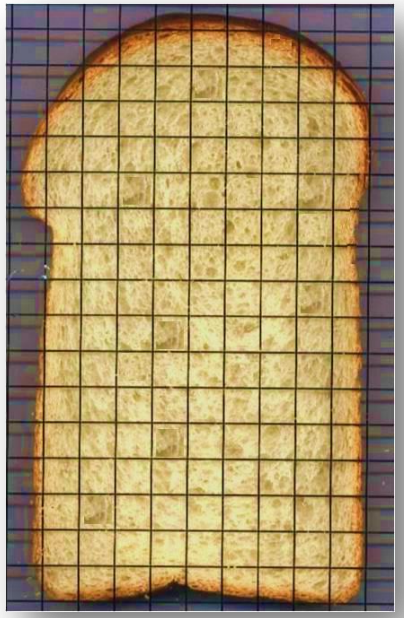
## Received into GrainCorp

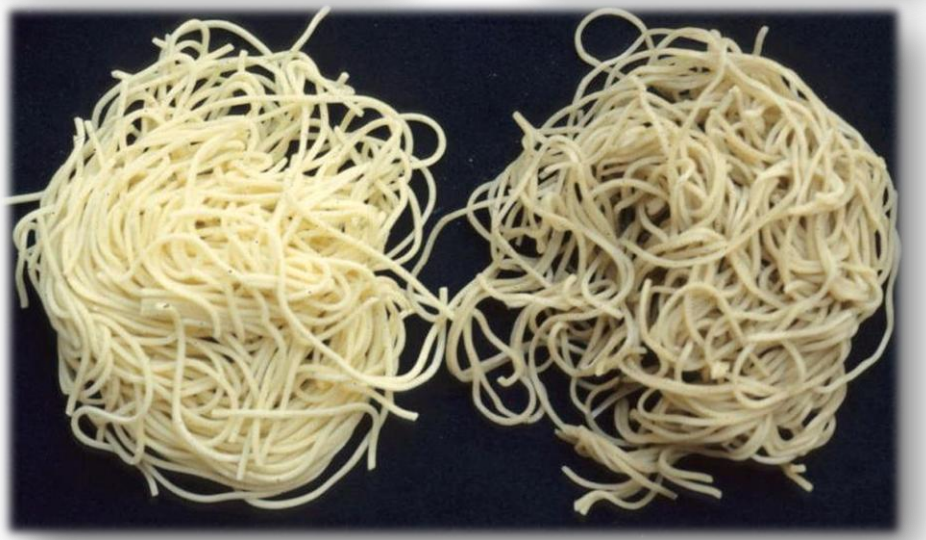


# Advantages of Milling White Wheat

- Higher Extraction
- Better Colour





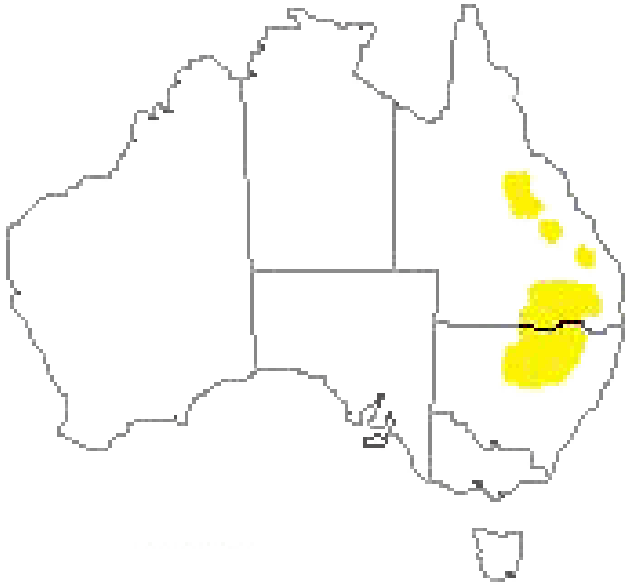


# Benefits of Prime Hard Varieties

- Most wheat varieties grown in **north eastern** Australia are APH varieties
- This means that even the lower grades (i.e. AH & APW) have better milling & baking characteristics than non APH varieties

# Australian Prime Hard

- **APH** is a hard white wheat that was first segregated in northern NSW in 1957-58 as "premium wheat" on basis of protein content
- Later restricted on basis of variety
- Became Australian Prime Hard 15, 14, 13% protein
- Finally it was called APH1 (>14pro) & APH2 (>13pro)
- Traditionally it is grown in QLD & NNSW (**BLACK SOILS** with higher nitrogen content which is not present anywhere else in Australia)
- Expanded to southern NSW (Port Kembla) in 1997



# Eastern Australia Barley Quality
## 2013/14

- **Grain size**: average to above average
- **Protein**: lower than average in southern NSW; higher in northern NSW; average in Victoria
- **Colour & appearance**: bright & above average. **Moisture**: low;  will have a good effect on malting barley's shelf life & germination

# Barley Profile-Eastern Region
## (QLD/NSW/VIC)

| Class | 5 year Protein %* | 13/14 Harvest Protein %* |
|---|---|---|
| **Malting** | 10.3 | 10.1 |
| **Feed** | 11.3 | 10.1 |

*dry basis

# Eastern Australia Canola Quality
## 2013/14

- Similar area planted to last season
- Lower yields in NSW, due to below average growing season rainfall
- Average yields in Victoria.
- Overall production was still higher than a 10 year average
- Generally low moistures, very good test weights and average to above average oil contents

# Canola Profile-Eastern Region
## (QLD/NSW/VIC)

| Class | 5 year Oil % | 13/14 Harvest Oil % |
|---|---|---|
| **Canola** | 42.6 | 42.3 |

# Eastern Australia Sorghum Quality 2013/14

- Good rains for planting in some areas, though more follow up rains are desired
- Lower soil moisture profiles are still considered adequate; upper soil moisture profiles are less than desired to establish large scale plantings
- Current sorghum plantings would benefit from more rainfall, & those sowings not yet commenced are awaiting rains while the end to the ideal sowing window is approaching

# Sorghum Profile-Eastern Region (QLD/NSW/VIC)

| Class | 4 year Protein %* | 13/14 Harvest Protein %* |
|---|---|---|
| **Sorghum** | 10.4 | NA** |

*as is basis
**not yet harvested