



# Summary 2017 Barley CAIGE

Glen Fox



Queensland Alliance for  
**Agriculture & Food Innovation**



**Queensland  
Government**



## Grain quality three sites

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- Three sites tested for protein and test weight, based on possibility of being within malting specifications (MD pers comms)
- Narrabri, Wongan Hills, Roseworthy
- Wongan Hills within malting specs, albeit slightly high for moisture
- Subset from Wongan Hills, based on yield, to be malted (happening now)

# Summary 2017 Barley CAIGE check varieties 3 sites

Cultivar	Wongan Hills*			Roseworthy			Narrabri		
	Moisture (%)	Protein (% asis)	Test weight (kg/hl)	Moisture (%)	Protein (% asis)	Test weight (kg/hl)	Moisture (%)	Protein (% asis)	Test weight (kg/hl)
Alestar	13.2	9.9	69.0	9.9	14.7	61.0	11.1	12.4	71.6
Capstan	13.5	9.7	67.9	9.9	14.3	62.0	11.3	13.3	67.3
Commander	13.4	9.7	70.7	9.8	14.2	66.0	11.6	14.4	68.6
Compass	13.8	9.4	69.0	9.9	14.0	63.6	11.0	14.1	69.2
Fathom	13.2	10.3	70.4	9.9	13.5	62.4	11.6	13.5	71.0
Flinders	13.5	10.1	72.6	9.9	14.1	63.3	11.3	13.3	71.3
Gairdner	13.3	10.1	72.0	9.9	14.4	64.6	11.4	14.4	70.2
GrangeR	13.6	10.6	69.4	9.8	14.6	66.5	11.8	13.1	70.7
Hindmarsh	13.7	10.3	71.8	9.9	13.7	66.5	11.5	11.7	71.1
ICARDA068	13.4	12.0	68.2	9.9	14.1	65.3			
ISBYTLRAC-003	13.3	11.7	67.7	9.8	14.4	63.5	11.7	15.2	64.5
ISBYTLRAM-004	13.6	10.8	69.6	9.9	15.2	63.1	11.3	14.9	68.2
Latrobe	13.4	10.8	70.3	9.9	15.7	64.6	11.2	15.1	70.7
Nawair-1	13.4	12.0	67.1	9.8	14.9	64.4	11.2	17.6	69.8
Rosalind	13.9	10.1	69.4	9.9	12.7	61.6	11.3	12.2	71.5
Scope	13.5	10.2	70.3	9.7	13.9	64.3	11.2	13.9	71.1
VMorales	13.0	10.7	65.6	9.8	13.1		11.1	14.5	68.2

# Lines for malting

2:ZBT16	2:ZIB16	
8:ZBS16	8:ZBT16	8:ZIB16
21:ZBT16		
41:ZBS15		
41:ZBT16		
44:ZBT16		
48:ZBS15		
49:ZBS15		
58:ZBT16		
67:ZBS16		
79:ZBT16		
88:ZBT16		
110:ZBT16		
116:ZBT16		
132:ZID14		
175:ZBT16		
177:ZBT16		
226:ZBT16		
229:ZBT16		
ISBYTLRAC-003		
ISBYTLRAM-004		



## Malting quality

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- First season malt quality testing (no budget allocated, using savings)
- Wongan Hills - showing slight signs of weathering, high levels of black point
- Early season malting (normal starting late March)
- Malting using standard 6 day (17°C 4 day germination)
- Standard EBC tests (MBIBTC scores) plus additional DPEs
  
- Results sent ASAP to CAIGE co-ordinator/breeders



## Summary

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- Mix of results over seasons and sites
- Tested as Stage 1 trial material, so ranking not absolutes
- Hardest accreditation system for any premium valued grain
- Best with 2 reps (not blended)
- Future – multiple sites for malting evaluation
- Proteomics as a selection tool (>140 proteins)