

“The complexities of Australian malting barley”

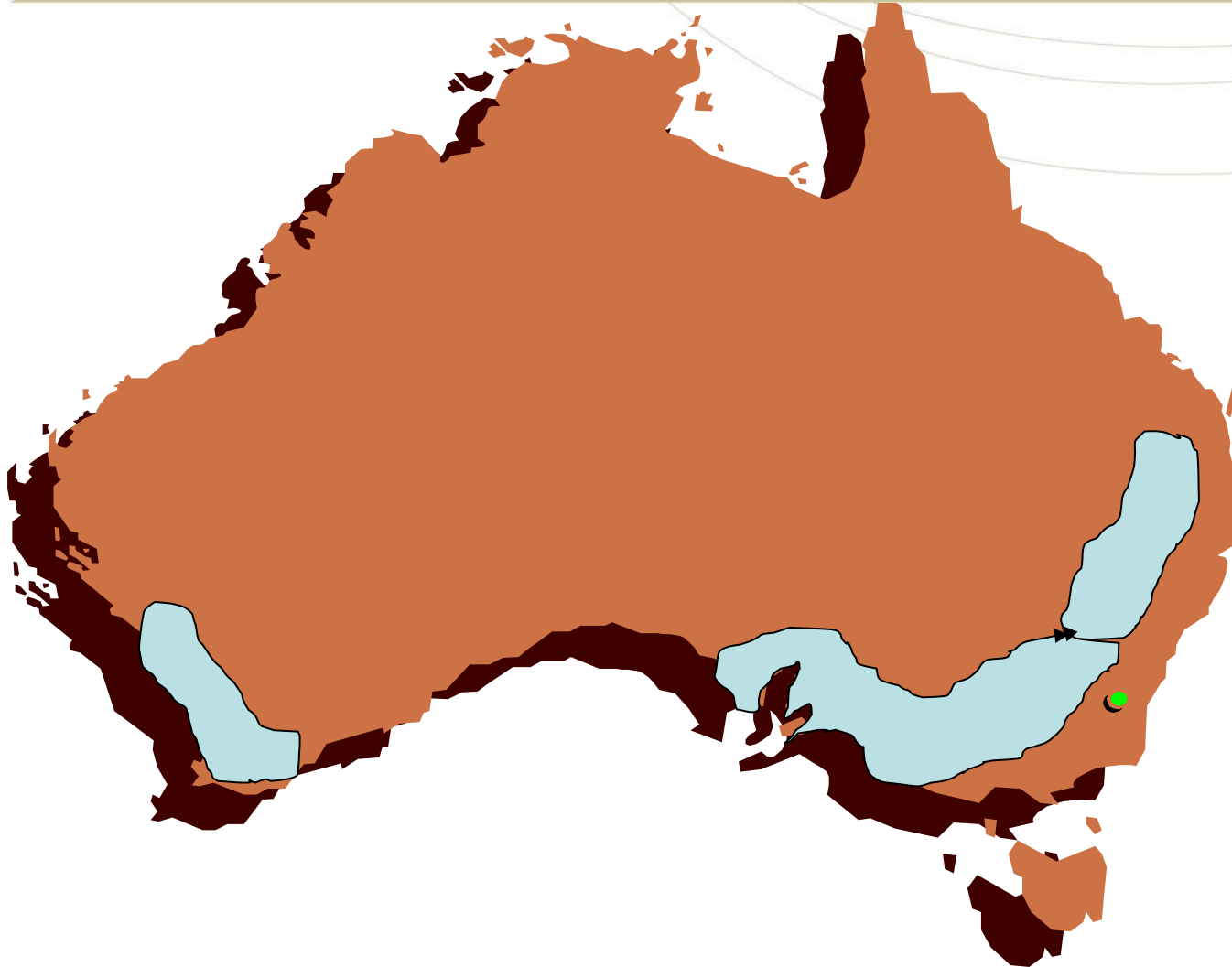
Quality Barley for Australia and the world.





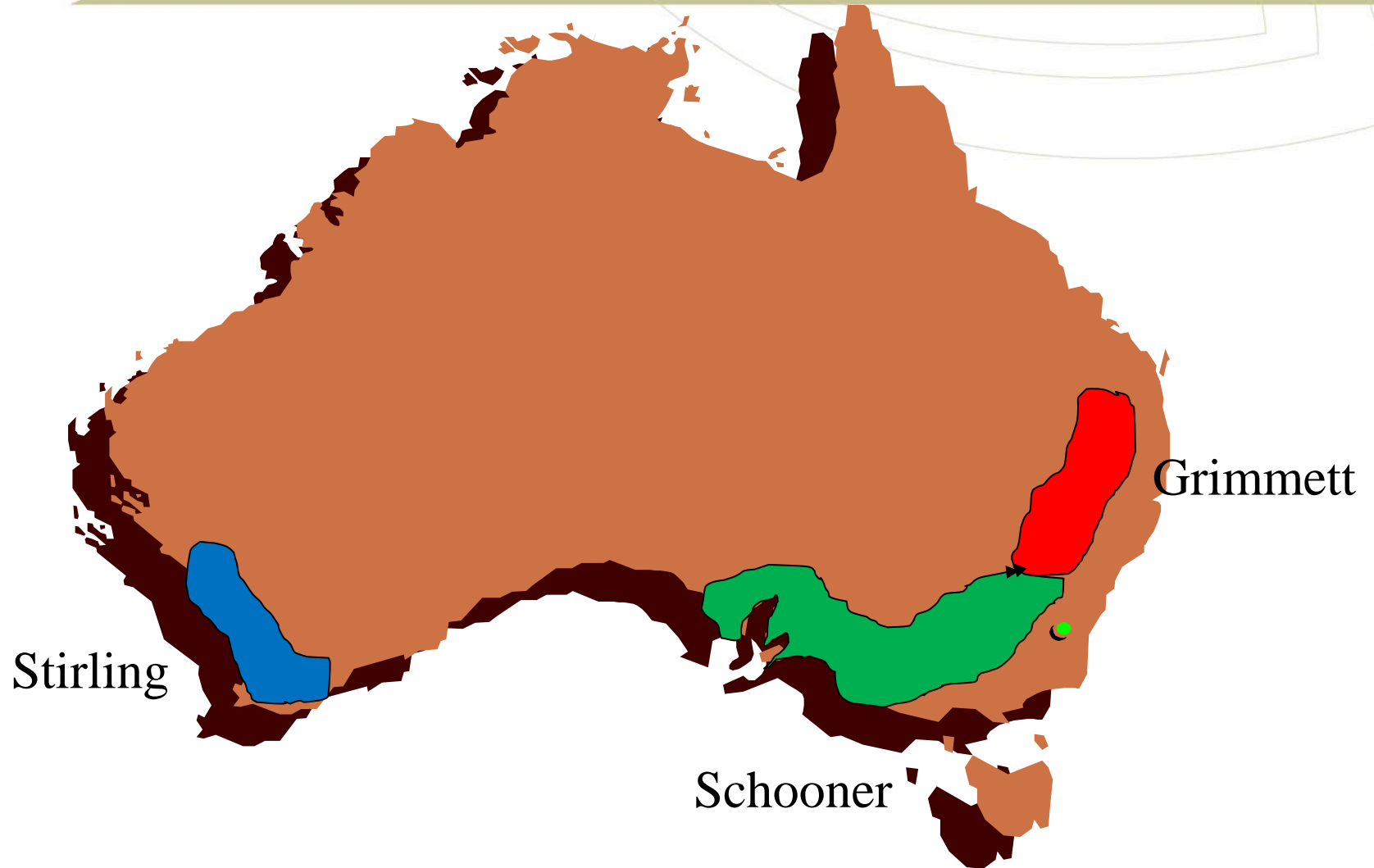
Malting Barley 1960s – mid '80s (Clipper)

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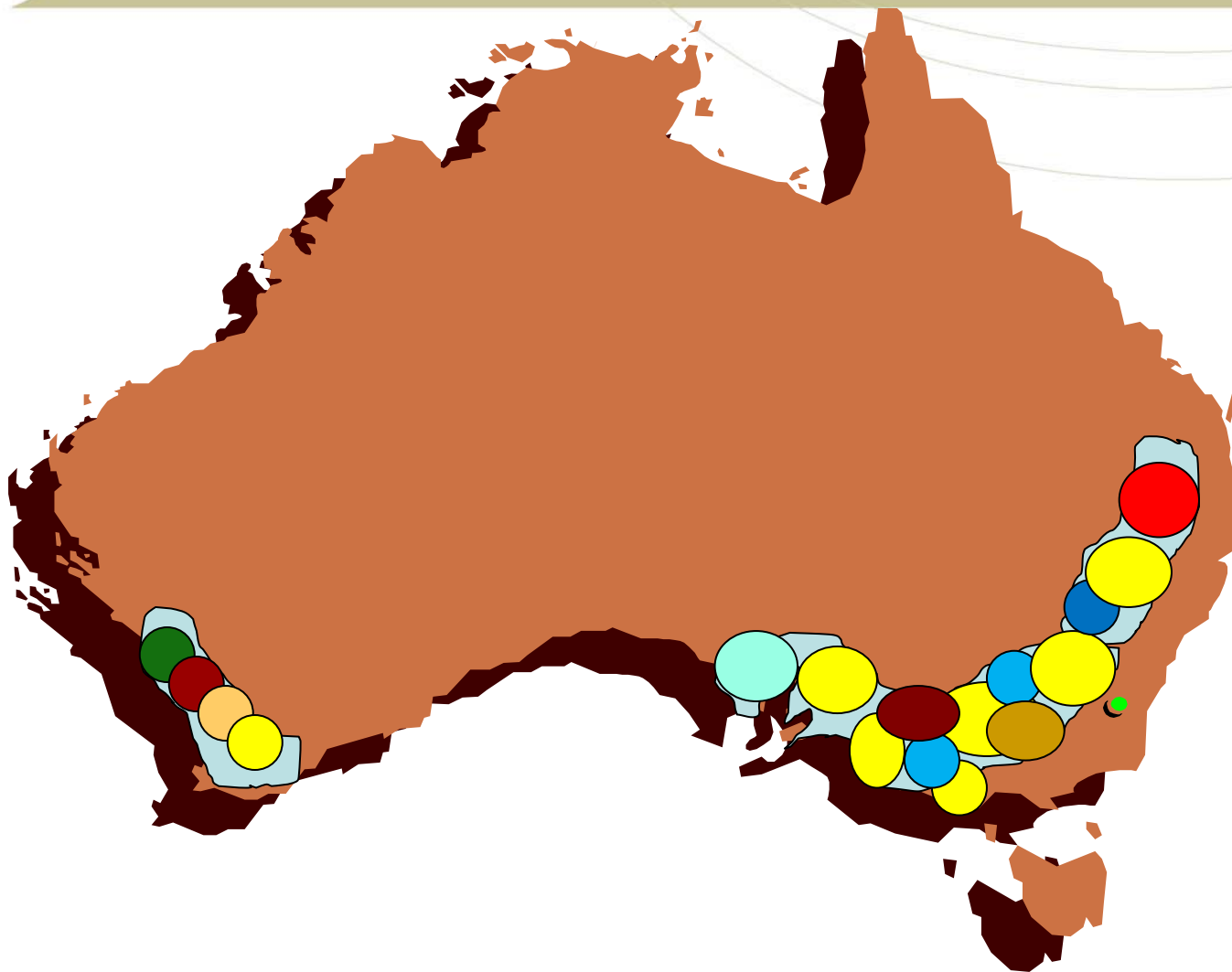
Malting Barleys 80s-90s (Grimmett Schooner Stirling)

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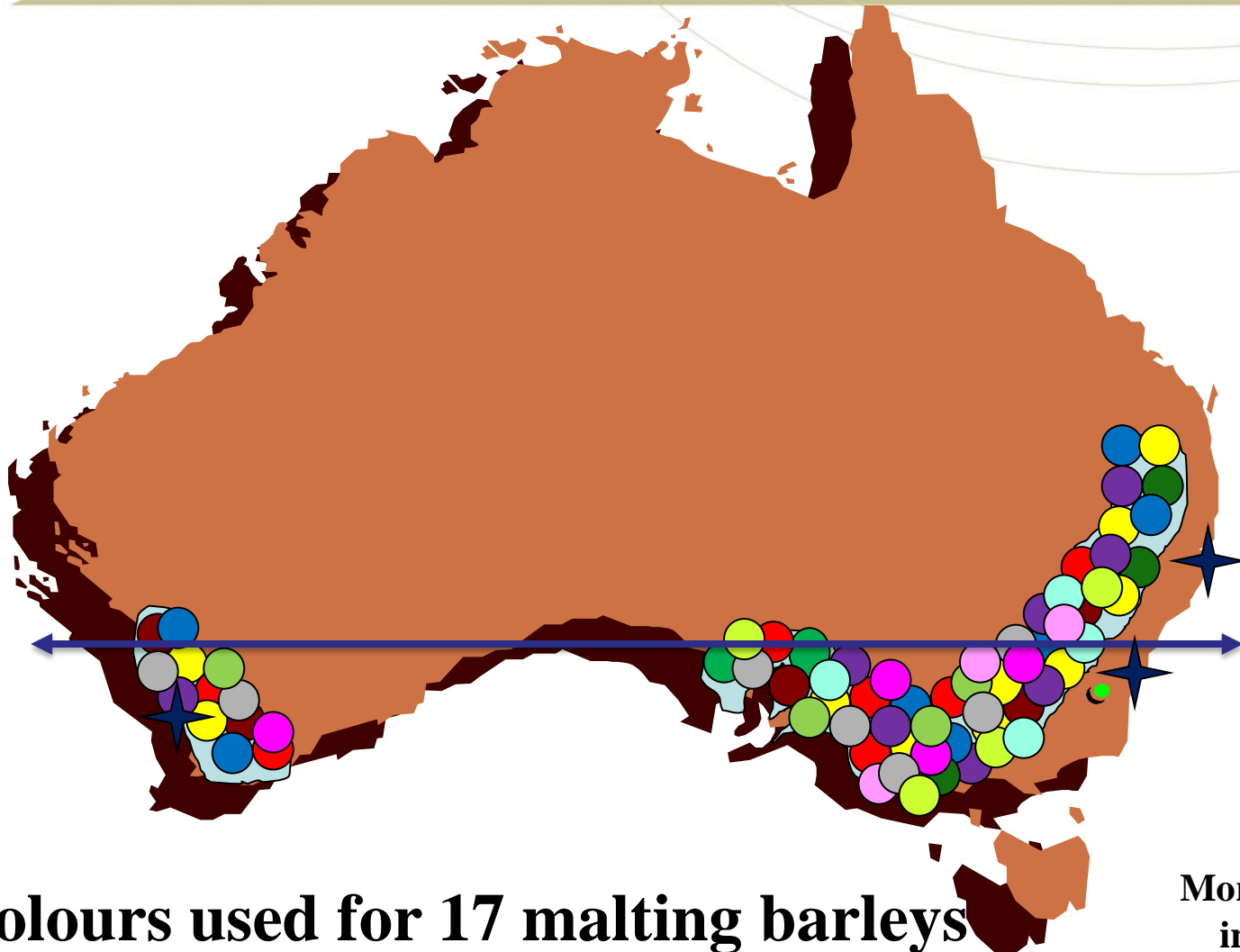
Malting Barley varieties 90s - 2005

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Malting Barley - today

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- 1 Baudin
- 2 Bass
- 3 Buloke
- 4 Commander
- 5 Fairview
- 6 Fitzroy
- 7 Flagship
- 8 Gairdner
- 9 Grange
- 10 Hamelin
- 11 Henley
- 12 Navigator
- 13 Schooner
- 14 Scope CL
- 15 Stirling
- 16 Vlamingh
- 17 Westminster

12 colours used for 17 malting barleys

**More yet to come
in the future**

Bright coloured – less germination shelf life issues

Desirable by buyers – but does it have the EU type 2.5mm retentions?

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**> 2.5mm
Protein**

GTA standards

**min 70%
9.0 – 12.0**

Chinese buyers

**min 85%
10.0 – 12.0**

>70

>75

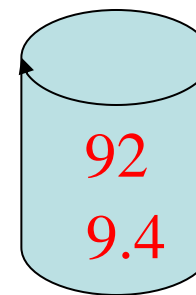
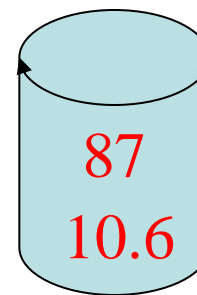
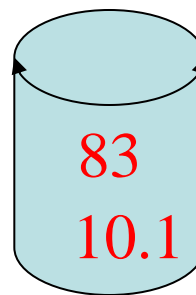
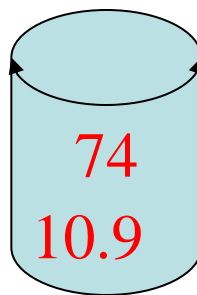
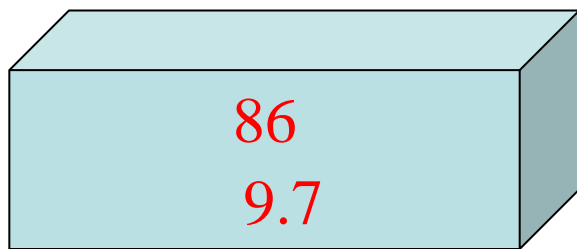
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>90

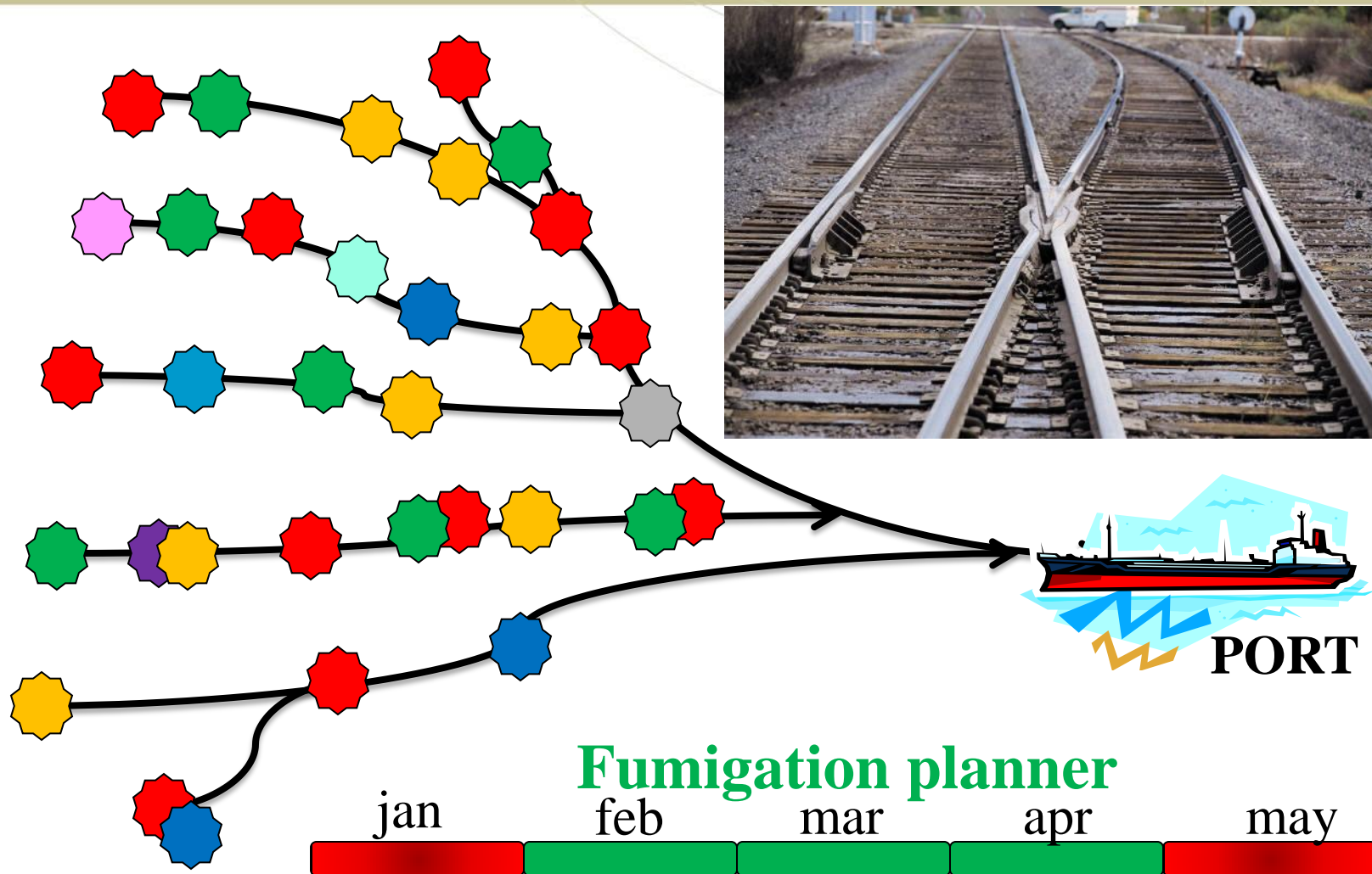
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domestic	domestic	domestic	domestic	domestic	domestic
			export	export	export



Multiple rail-lines needed to accumulate exports

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20 issues facing the malting barley industry

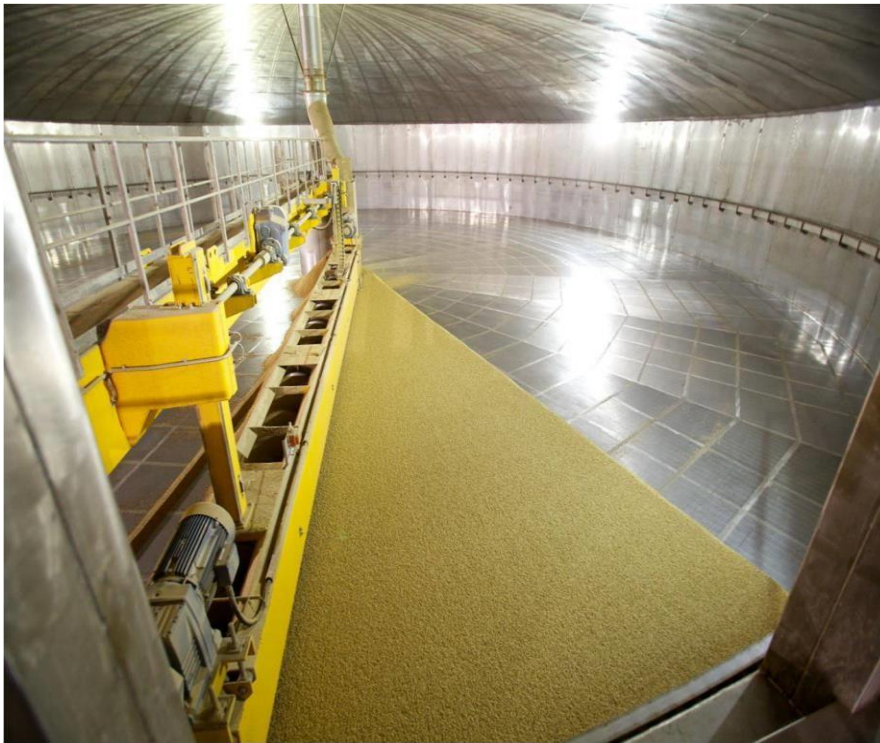
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1. Geography of new malting varieties and their segregation constraints
2. How to develop malting market sales for multiple malting barley varieties
3. Contract execution complexities with multiple varieties across multiple geographies, and maintaining varietal purity
4. Trains – crewing, time slotting, logistics complications
5. GTA receival spex vs CBH receival spex

6. GTA domestic spex vs China export spex - vs EBC methods - vs ASBC methods (sieves)
7. Importance of barley regional committees and their valued expertise
8. Insect control with resistant species – barley is the first crop harvested
9. Dichlorvos de-registered impacting insect control
10. Fumigation co-ordination within and across port zones / storages / with relation to multiple varieties





11. Acceptable pesticides to battle future insect resistance- eg Spinosad
12. Japan / China / Taiwan pesticide residue limits
13. End Point Royalty collection needed to support future breeding
14. Dormancy for the north – is it adequate enough?

15. Germination confidence during storage over time – NNSW/QLD
– **grain dryers / weathering / elevated moistures >11.8% / Falling No.s**

16. Barley receival standards – GTA vs WA. Who has a say in which state?
17. Malting barley variety assessments and accreditations – Barley Australia system; utilising expertise in malting and brewing sectors
18. GRDC investments now being more grower-focussed. But does industry really understand science project benefits proposed to them?
19. Funding of collective industry barley issues? Where does the money come from - who are the stakeholders?
20. One voice for the industry – the Barley Australia industry consultation rounds and forum.



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- The breeding of competitive barleys that target complex agronomic and market demands across vastly different climatic and soil type regions
- Australian brewing vs export brewing requirements in barleys are different



A sustainable malting barley industry tackles:

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•Logistics complexities of managing freight movements down multiple rail lines simultaneously for cargo accumulations, over mountain ranges and different terrains - during extremes in weather - with multiple exporters' stock ownerships of ***different grain size and protein qualities*** to meet complex export contract specifications, ***the vast majority of which, is sold at much tighter specifications than our GTA or CBH standards*** being applied to grower harvest receivals (ie: what they are stored at).



A sustainable malting barley industry tackles:

Quality Barley for Australia and the world.

- ***Foreign material*** limits and ***grain size demands*** of some overseas buyers are at times somewhat challenging.

We have some of the most modern harvest machinery in the world providing clean grain, and we have some of the best varietal breeding and development programmes in the world targeting agricultural crops ***grown in a mostly hot, dry nation***



Foreign Seeds:

**TYPE(1) TYPE(2) TYPE(3a) TYPE(3b): TYPE(3c): TYPE(3d):
TYPE(4): TYPE(5): *TYPE (6) NIL*, TYPE(7a):TYPE(7b)**

**Wheat, Cereal Rye, Triticale, Rice, Cultivated Oats
Max 85 seeds per half litre (approx 1% by weight)
(500/h-litre in feed barley – approx 6%)**

Wild Oats, Wild Radish - max 25 per half litre (50-feed)

Small Foreign Seeds max 0.6% (1.2% in feed barley)

Foreign Material (% by weight per half litre)

Other than already specified includes: Chaff, straw, backbone. **Max 1%**

- Industry voices from all of us are needed from time to time to provide:
 - DAFF with support information that can aid them in their quarantine or trade access negotiation issues wherever these arise.
 - Support for ongoing work being done towards eg: the growing battle in insect control issues such as insect resistance to phosphine etc.
- Barley Stripe Mosaic Virus (BSMV), testing on barley for China:
Exporters have now conducted thousands of tests over 20 yrs without positive results. Last year, DAFF updated their MICOR database guide with the following:

Test results for the presence of Barley Stripe Mosaic Virus in the consignment must be provided with the Notice of Intention to Export Prescribed Goods when submitted to the DAFF Biosecurity inspector.

A sustainable barley industry tackles such issues as:

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Automatic sampling systems.

We have invested millions \$\$ of dollars in our Australian terminals to install ***automated*** sampling systems, to provide accurate representative shipping samples for superintendent analyses on contracts.

Is this the case overseas?

How accurately are samples drawn at cargo unloading?

Ad hoc? Random?

Yet buyers sometimes wish to make quality claims at unloading even though investments in installing accurate sample taking equipment has not been undertaken.



- Agricultural chemicals – Bill Murray’s contribution and expertise.
- Pesticide residue limits in export markets are becoming stricter, which is creating enormous complexities to achieving adequate insect control. Are pesticide residue testing limits of max 0.01ppm really achievable and sustainable in trade?

•0.01ppm = 1 part in 100,000,000

•*One 60sec period in time in 100 million minutes dates back to:*

1823

•(clean augers, elevators, belts, road trucks, rail wagons, clean untreated sample collection tubes,— must be pristine clean, untreated and insect free. Then there are labs themselves: clean lab utensils/glassware, buckets, lab staff cleanliness...) We’ve already had nicotine being picked up in Japan, dog/cat/flea collars?

...and then there is germination to worry about



SUMMARY

A horizontal banner with a light olive green background. On the left, there is a circular inset showing a close-up of golden barley grains. To the right of this inset, the text "Quality Barley for Australia and the world." is written in a light, italicized serif font.

Quality Barley for Australia and the world.

Today there is an even greater need for:

Exporters / Marketers / Maltsters / Brewers / Researchers / Breeders / Storage Providers / Growers and other barley industry stakeholders, to come together on issues that affect us all.

There is also a further need for ongoing education and forums within the barley industry over the complexities we all face from insect control to marketing – from farm to consumer.

Open dialogue goes a long way to helping supply the world's growing demand for barley and to continue to **grow our advantage.**

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Thank you

