

Introducing the Australian Mungbean Association



Australian Mungbean Association





Australian Mungbean Association (AMA)

- Non-profit organisation representing and linking all sectors of the Mungbean Industry in Australia
- Commercial partner in the National Mungbean Improvement Program (plant breeding)
- Strong organisation structure
- Industry focused leadership
- Information sharing www.mungbean.org.au



Who is the AMA?

- AMA is a non-profit organisation with members from all sectors of the Australian Mungbean Industry
- The primary objective of the Association is to work for the improvement and development of the mungbean industry in Australia
- The AMA is committed to collaborating and developing effective networks and linkages between all key stakeholders and aligning these for the common good of the industry

Aims of the AMA – strong structure supporting industry development

1. Food Safety and Hygienic standards (code of hygiene and vendor declarations)
2. Release of superior mungbean varieties as commercial partner with DAF and GRDC
3. Information source to mungbean growers
4. Increase production in line with strategic pl
5. Industry seed scheme

Our focus

- The Association has a strong focus on ensuring:
 - ❖ High levels of food safety and hygienic standards are maintained
 - ❖ Quality assurance systems are adopted that improve traceability of our produce and market confidence in Australian mungbeans
 - ❖ Superior mungbean cultivars that will achieve both higher returns for producers and also meet overseas consumer demand for premium quality mungbeans
 - ❖ Mungbean producers have ready access to the best available production, marketing and industry information

Industry links

- AMA membership includes 12 processing establishments, 11 exporting members and 9 other Industry members.
- Linkages with Pulse Australia to provide agronomic support and deliver Accredited Agronomy courses
- Celebrated 30 years as an organisation in 2016
- AMA Subcommittees covering
 1. Seeds
 2. Standards
 3. R & D – research and development
 4. DAF and exports



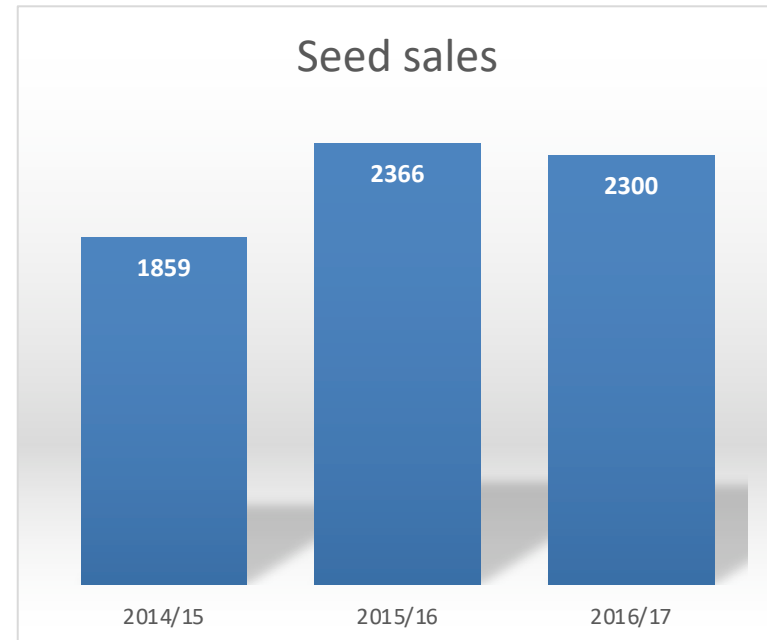
Industry development

The AMA is involved with the following industry development initiatives:

- Commercialisation of varieties released from the National Mungbean Improvement Program
- Accredited Agronomist Program
- Approved Seed Program
- Quality & Food Safety Standards
- Trader Code of Ethics
- Halo blight PhD research

Commercialisation achievements

- The AMA has a strong track record for achieving rapid adoption of new varieties
- Jade-AU quality was immediately well-accepted in the marketplace and has been used as successful in the sprouting market
- There is continued confidence in Crystal as some growers still prefer this variety
- Celera II-AU successfully replaced Green Diamond, which had severe susceptibility to Halo Blight
- Continued support from domestic and export markets for the Satin II variety for the sprout market
- Most recent release, Onyx-AU, has replaced long-standing black gram variety Regur



Mungbean Industry Strategic Planning



5-year Strategic Planning Process

- **Survey Results: Who responded?**
- A total of 131 completed survey responses were received
- 33 growers totalling 49,203 ha of dryland cultivation and 4011 ha of irrigation
- 49 agronomists/advisers servicing a low of 179 growers in the 2013/14 season to a high of 255 in 2011/12
- 17 processors and/or exporters representing an estimated 80,000 tonnes of export in 2015/16
- 32 members of the RDE and lab sector

AMA industry in-kind contributions

- In excess of \$200k per annum: with activities including past and present -
 - Support Research & Development programs through funding of:
 - Accommodation & meals, Travel expenses, Consultancy, Seed testing, Seed appraisal, Conference calls, Sprout testing, Growing trials, Overseas study tour
 - Extension Work including:
 - Management packages for new varieties
 - Crop Competition
 - Agronomist Accreditation & updates
 - Drafting, editing & printing publications
 - Paying for Sprout test costs on new lines
 - Coordination and funding of Taiwan Study trip
 - Co-funding of research into halo blight through a PhD scholarship
 - Trade display at Qld State Government Ag Conference, Pulse Conference
 - Key stakeholder in Australian Summer Grains Conference
 - \$20,000 annual contribution to Pulse Australia

AMA achievements

- Developed the AMA 'Code of Hygienic Practices'
- Developed the AMA 'Code of Ethics'
- Implementation and continuous improvement of Australian Mungbean Standards
- Mungbean Industry Strategic Plan
- Mungbean Agronomy manual & workshops
- Successful partnerships and commercialisation of new varieties through the National Mungbean Improvement Program
- Industry promotion driving grower adoption of & profitability from mungbeans
- Collaborate & communicate across all research bodies to ensure a united and organised effort
- Established the AMA website



Approved Seed Production Scheme

- There are 8 Approved Seed Producers (recently increased by two)
- Independent 3rd party inspections for all Seed crops
 - Primary focus is to minimise disease risk
- Seed production across a broad area to minimise climatic impacts
- Use of Accredited Agronomists for in-crop management
- Regular communication within Seeds committee to ensure sufficient supply
- Compliance with DAF commercialisation agreement, collaborative agreements, adoption plans, pipeline meeting outcomes
- Promotion of 'Approved' Seed through:
 - Roadshows, TV and newspaper advertisements, social media, promotional materials, website, field days
- New agreements to include:
 - 3rd party Auditing of individual Seed Producers
 - Improved traceability and record keeping requirements

Approved mungbean seed

Seed sold in clearly labelled bags as AMA Approved Seed has been harvested from dedicated seed crops that have been inspected to ensure minimal risk of the seed borne diseases tan spot and halo blight.



The Future

- We see a very strong future for the Australian mungbeans industry and believe the AMA is the ideal partner to help maximise the outcomes of the National Mungbean Improvement Program
- The AMA's ability to collaborate across all industry stakeholders, coupled with the direct linkages through the value chain from seed to end markets, positions the AMA as the most logical partner to deliver successful and sustainable adoption and maximum returns from variety commercialisation

Recent news

- Doubling of Pulse Australia funding in return for increased agronomic support (incl. Agronomy workshops)
- Investment of \$120,000 over 4 years for PhD research to understand and breed out susceptibility to halo blight in mungbeans
- Potential study tour in 2019, assisting the plant breeding team
- Mungbean technical day – researchers reporting to industry

Recent news

- Participation and organisation at the 2019 Australian Summer Grains Conference
- Trade display at the Pulse Conference in 2019
- Website improvement with increased stories and points of interest
- Advertising of mungbeans in print and on radio, TV and social media
- Participation at International Sprout conference in 2019
- Release of new black gram variety, Onyx-AU

Mungbean Production





Why growers choose mungbeans

An industry survey in 2014 indicated that growers choose to plant mungbean for the following reasons:

- as a double-crop opportunity immediately following a winter crop (e.g. wheat)
- to replace summer crops such as sorghum or corn to combat feathertop Rhodes and/or other grass weeds
- as an opportunity crop shifting from a summer crop cycle to a winter crop cycle.

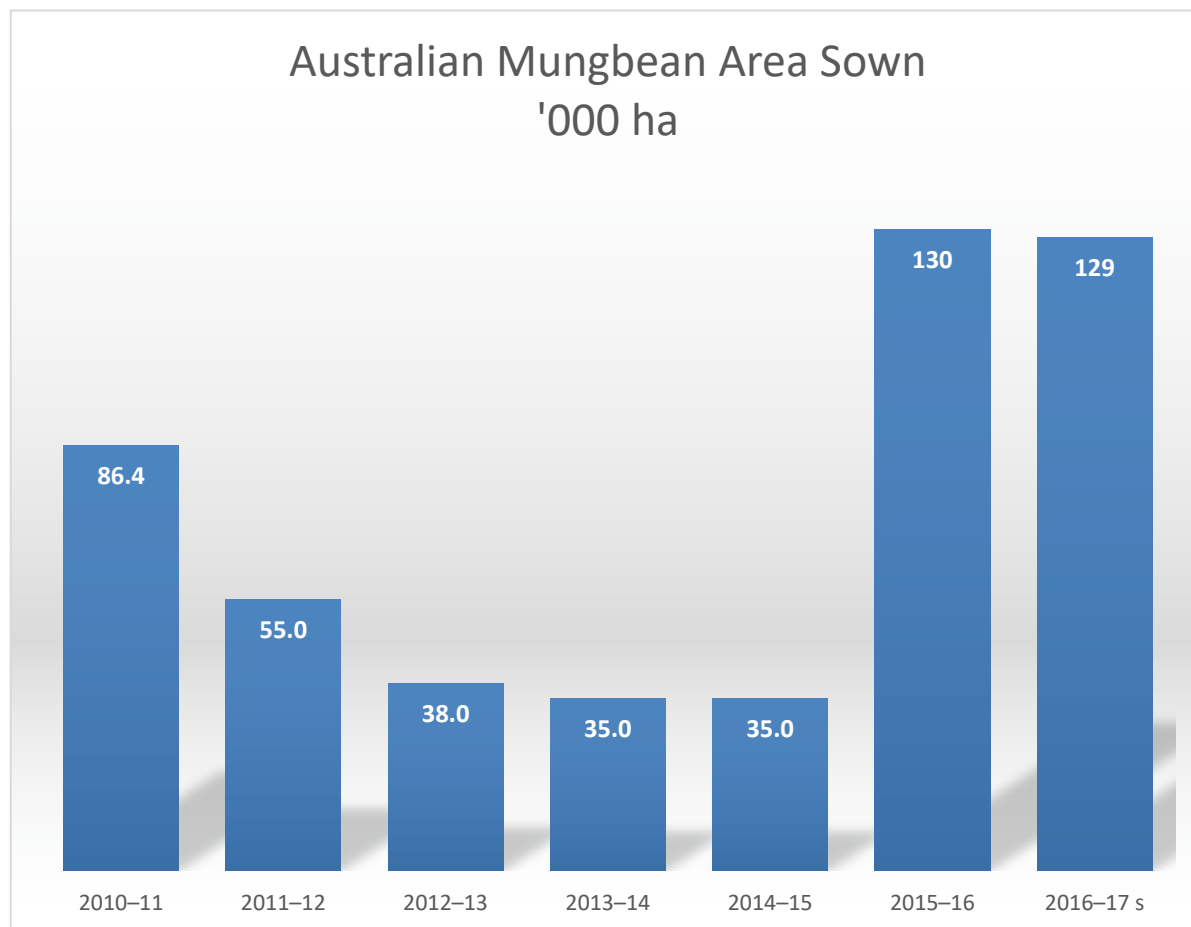
Mungbean production

- 2016 production increased to 150,000 tonnes
- Key markets are India, China, Vietnam, Sri Lanka
- Accredited agronomy courses demonstrate the advantages of growing mungbeans and upskill agronomists in best management practices for production and pest, weed and disease management

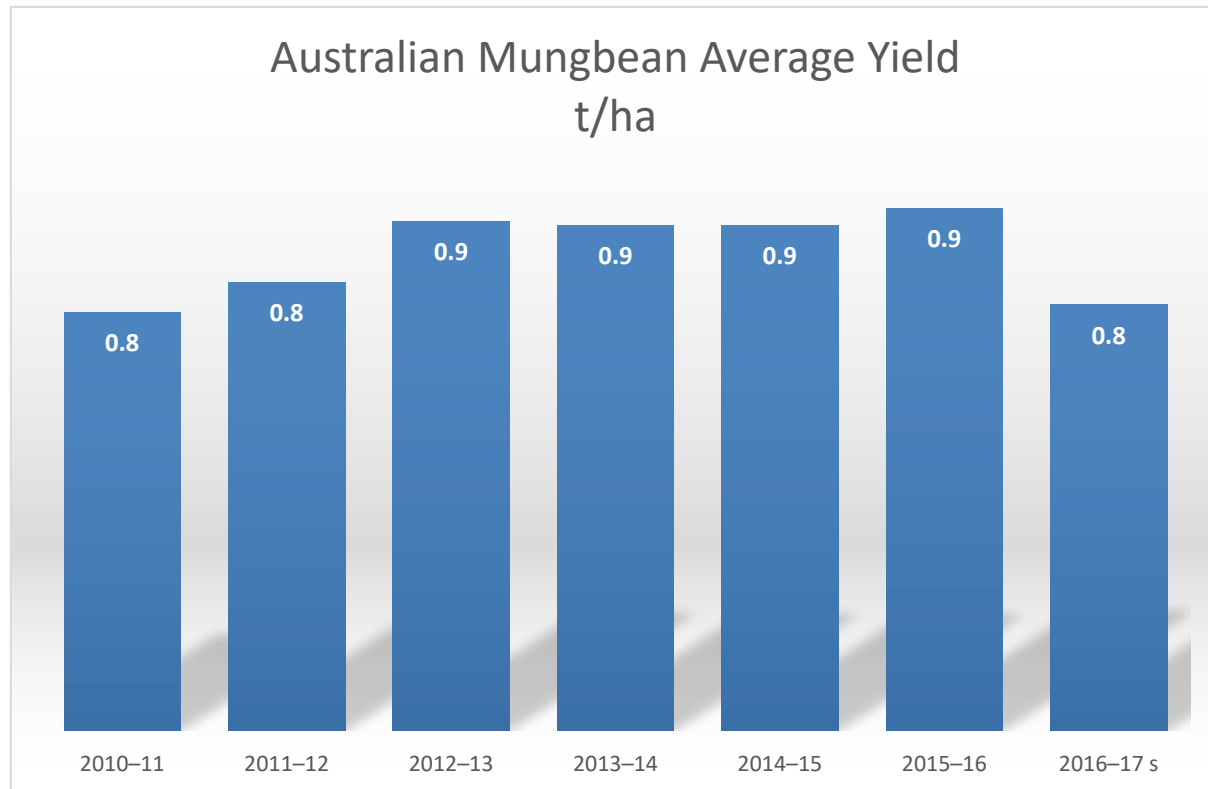
Mungbean demand

- Valuable rotation crop – spring and summer
- Choice of varieties suited to different areas and markets
- Irrigation provides stable production
- Food safety and traceability
- Growing domestic market
- Mungbeans supplied in 25 kg bags after grading
- Approved seed scheme – supplying quality seed to maximise production and minimise disease risk

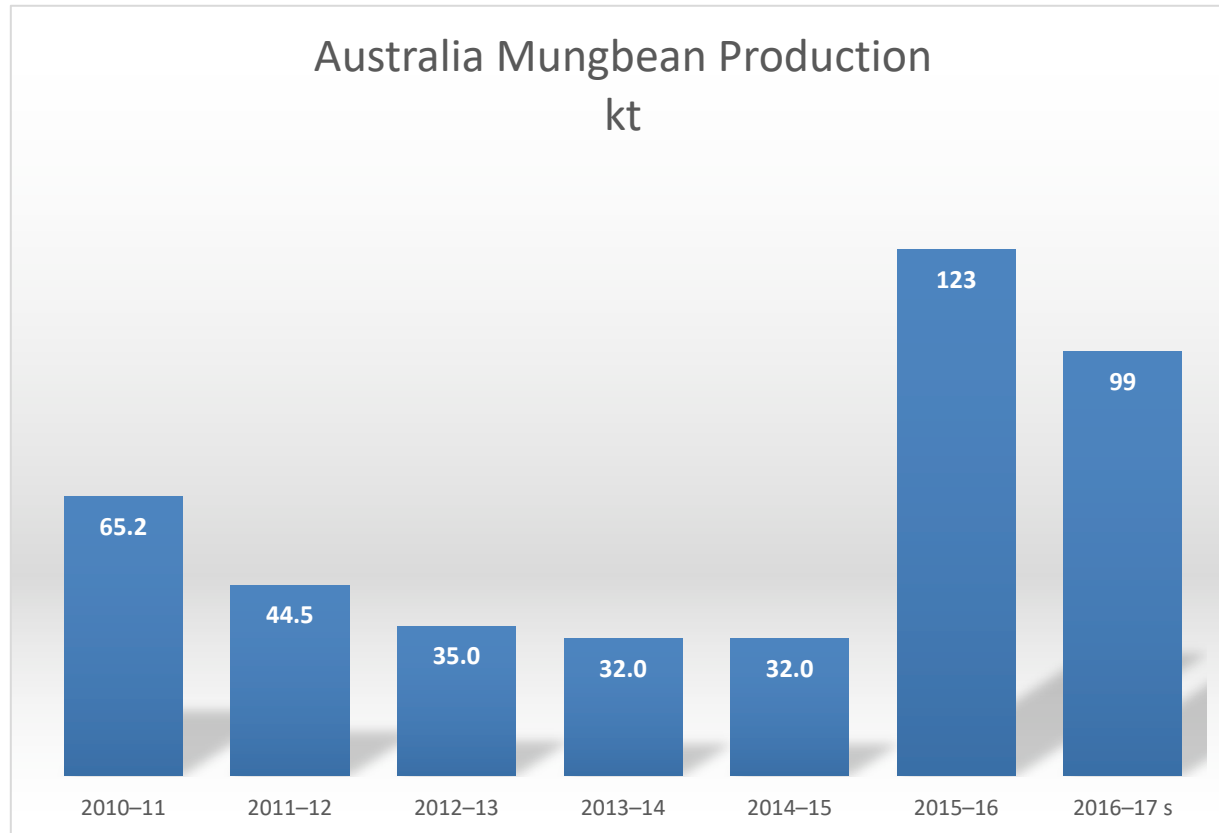
Production statistics – Area



Production statistics – Yield



Production statistics – Production



Production statistics – Production

Production includes exports plus approx.
20 000 t for seed and domestic
consumption

Mungbean Markets



Mungbean demand

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Interesting facts

- Mungbeans are treated as a vegetable in the world market – food safety is of paramount importance
- Supply and demand will determine price
- World production has increased with more countries exporting mungbeans – e.g. Argentina, African nations, Ethiopia (selling cheaper)
- India is becoming self-sufficient – currently producing 1.6 million tonnes
- Quality is important – Vietnam
- Profit needs to be there for both the grower and processor

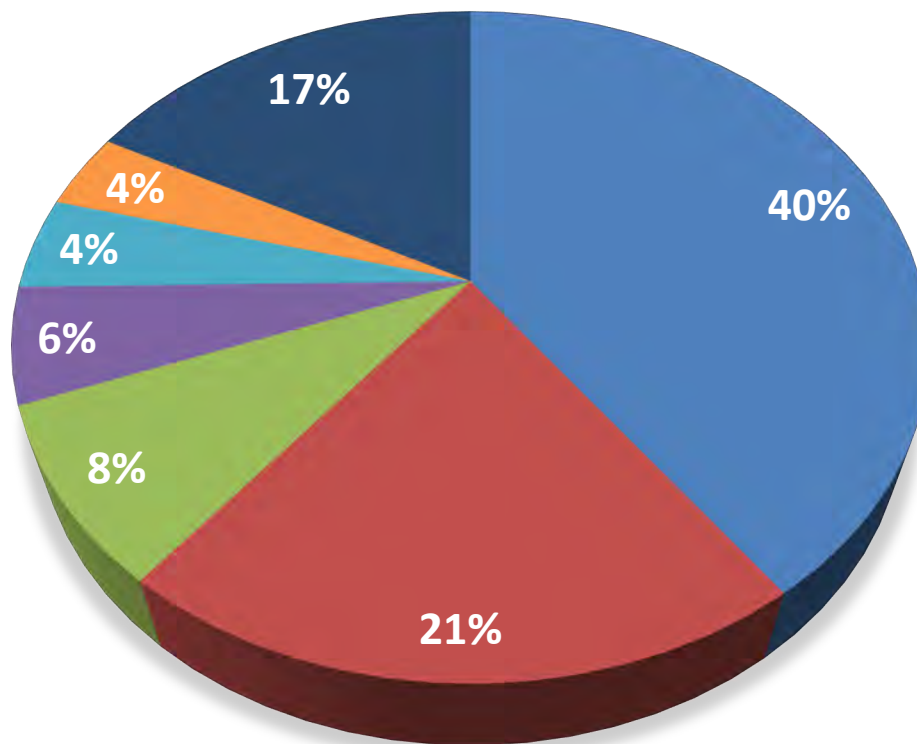
Versatile mungbean

- Sprouts
- Noodles
- Snacks
- Sweets





Australian mungbean export destinations 2015–16



■ India

■ Vietnam

■ China

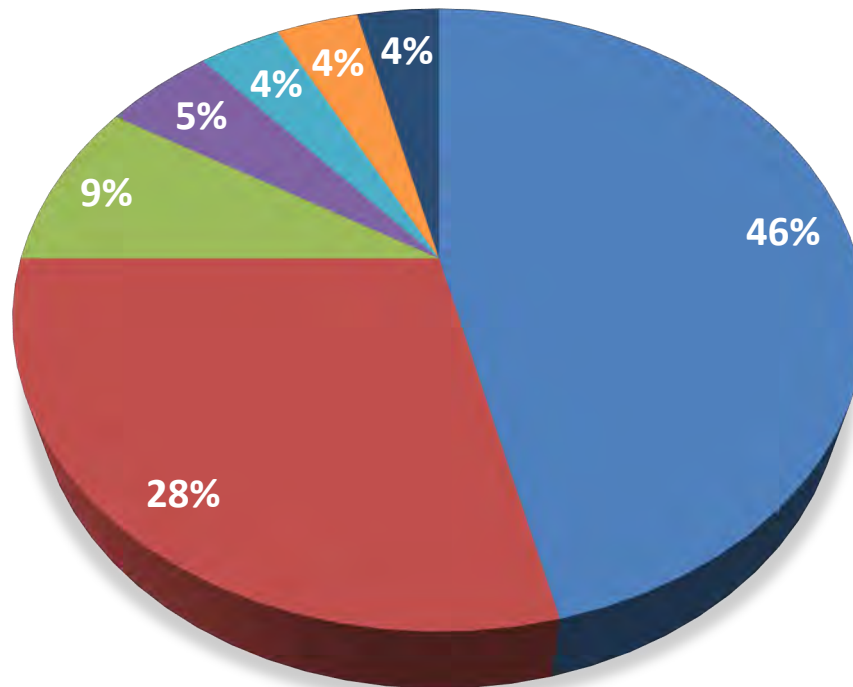
■ Sri Lanka

■ Thailand

■ Indonesia

■ Other

Australian mungbean export destinations 2016–17

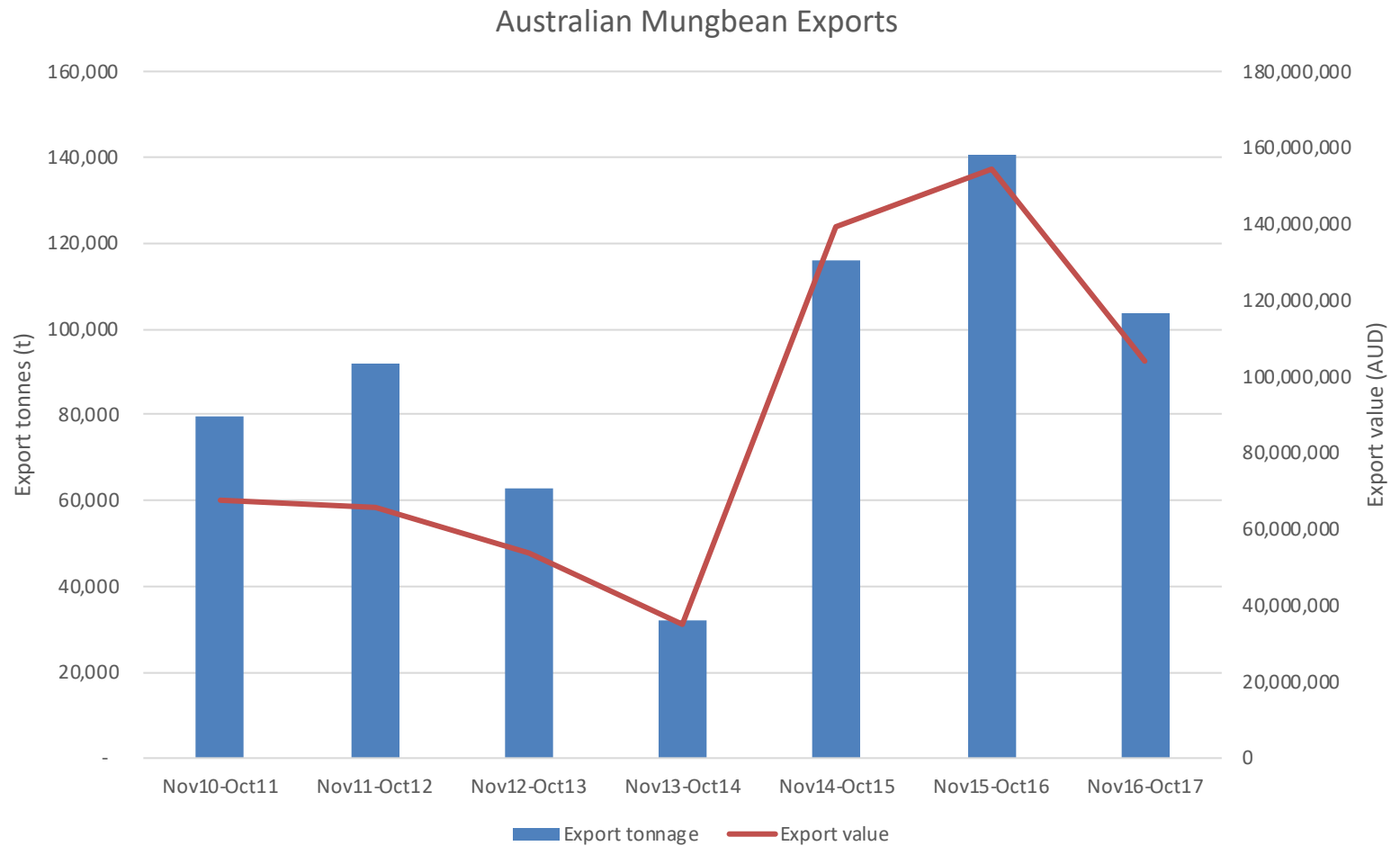


■ Vietnam
■ Taiwan
■ Canada, UK, USA

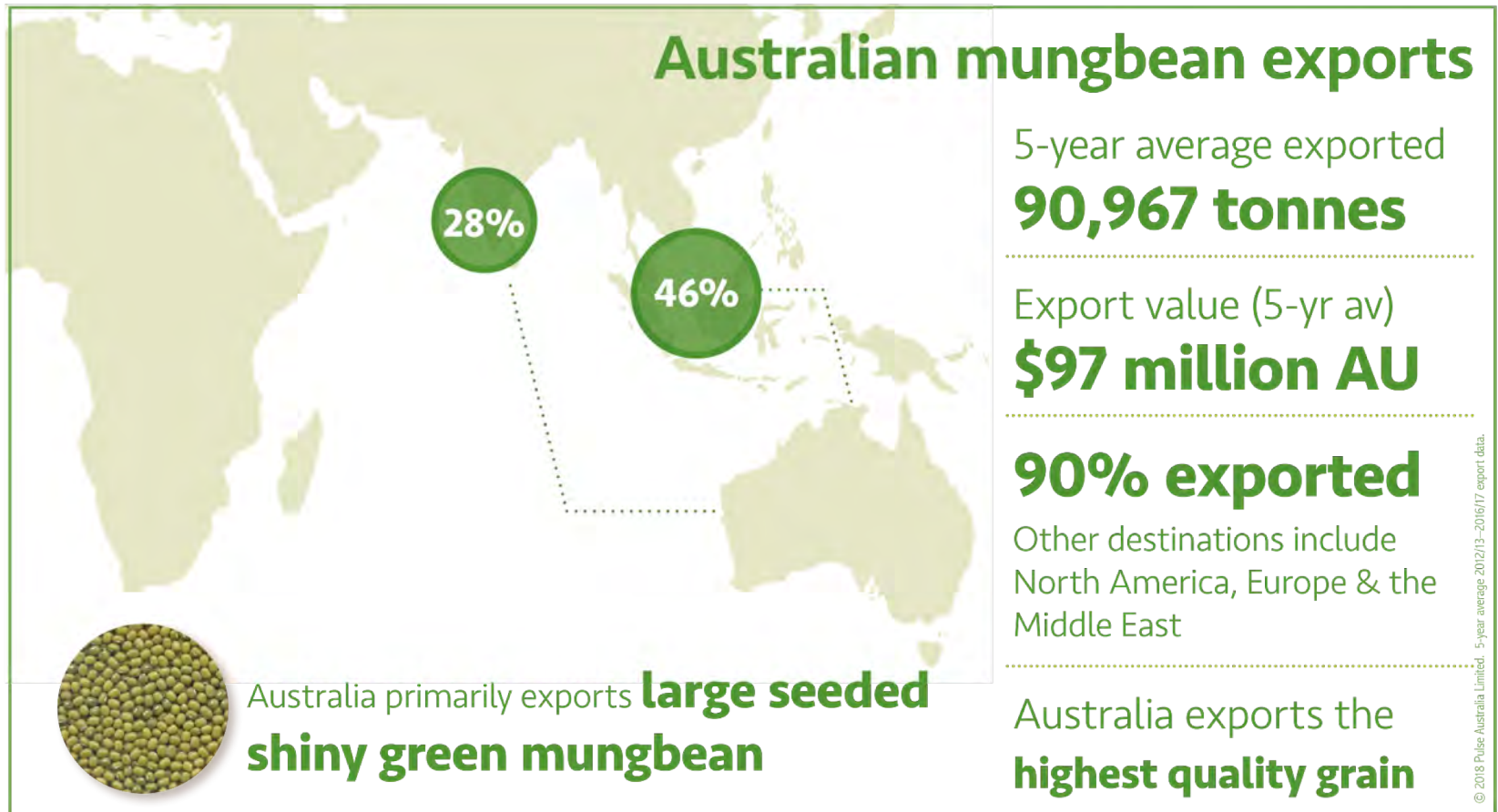
■ India
■ Philippines

■ China
■ Sri Lanka

Australian mungbean export totals and value



Australian mungbean snapshot





Opportunities for the Far North

- Growing out of season and capturing any production shortfall
- Seed production
- Being the first crop off – December harvest
- Opportunities with niche crops like Satin II, Celera II-AU and Onxy-AU (black gram)

Supply and Demand

WHAT DRIVES PRICE?

- Demand is the main driver of price
- Our largest production years have also been our highest price years
- Australia can increase production without negatively affecting price

WHAT DRIVES DEMAND?

- A preference of Australian Mungbeans by the consumer
- Clean safe food – Grower Commodity Declarations

HOW DOES SUPPLY IMPACT PRICE?

- Supply impacts price when we are competing for the same market
- Having preferred origin status is very important

Australia's competitive advantage

NO1



PROCESSING



MANUFACTURING



Maintaining our competitive advantage

- Continual critiquing and improvement of our quality systems
- Supporting industry bodies such as the AMA who support the GMB industry

Future risk factors to Australian green mungbean

- Degradation of quality systems
- Bulk commodity mentality

Australia's competitive advantage

NO1



PROCESSING



MANUFACTURING



Adding value to mungbean

- Our quality systems add value to all grades
- Our value add chain is local and accountable
- Quality grade is quantifiable in laboratory

Mungbean Varieties



GRDC
GRAINS RESEARCH
& DEVELOPMENT
CORPORATION



**Queensland
Government**





MUNGBEAN BREEDING

What's new from the
National Mungbean Improvement Program



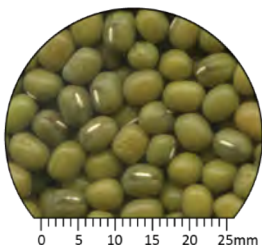
Hermitage Research Facility



- National Mungbean Improvement Program
- Partnership in plant breeding – Grains Research and Development Corporation (GRDC), Department of Agriculture and Fisheries (DAF), Australian Mungbean Association (AMA)

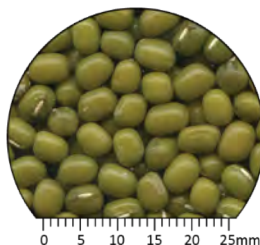
Current and past varieties

Large-seeded shiny green mungbean



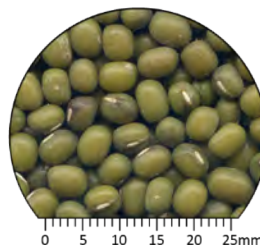
Jade-AU[®]

Released: 2013
Seed weight: 6.0–7.3 g/100
Coat colour: shiny green
Production region: North



Crystal[®]

Released: 2008
Seed weight: 5.9–7.1 g/100
Coat colour: shiny green
Production region: North



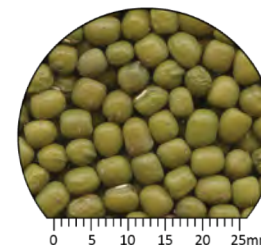
White Gold

Released: 2002
Seed weight: 7.1–8.3 g/100
Coat colour: shiny green
Production region: North



Reselected Emerald

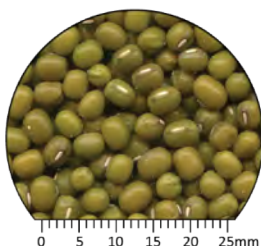
Released: 1993
Seed weight: 5.0–6.7 g/100
Coat colour: shiny green
Production region: North



Berken

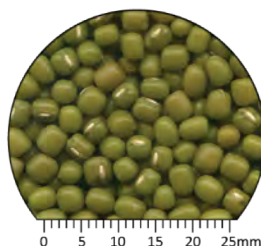
Released: 1975
Seed weight: 5.0–6.7 g/100
Coat colour: shiny green
Production region: North

Small-seeded shiny green mungbean



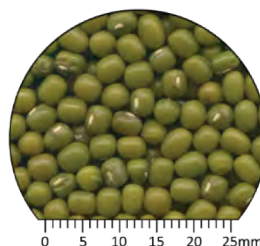
Celera II-AU[®]

Released: 2014
Seed weight: 3.2–3.5 g/100
Coat colour: shiny green
Production region: North



Green Diamond[®]

Released: 1997
Seed weight: 3.3–3.7 g/100
Coat colour: shiny green
Production region: North



Celera

Released: 1969
Seed weight: 3.2–3.5 g/100
Coat colour: shiny green
Production region: North



Satin II[®]

Released 2008
Seed weight: 5.9–7.1 g/100
Coat colour: dull green
Production region: North



Onyx-AU

Released: 2017
Seed weight: 4.5–5.6 g/100
Coat colour: black
Production region: North

Large-seeded dull green mungbean

Black gram (Mungo)

Partners



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

QAAFI
Queensland Alliance for
Agriculture and Food Innovation



World Vegetable Center



GRDC
GRAINS RESEARCH
& DEVELOPMENT
CORPORATION



Research
Centre for Crop Health



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Useful images



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Government**



Dryland mungbean production



Dryland mungbean production



Irrigated mungbean production



Grading mungbeans



Agronomist Accreditation



Looking closely at everything

