



AUSTRALIAN PULSE VARIETIES 2024



Grains Australia
is an initiative of the
Grains Research &
Development Corporation

Introduction

This publication provides details of the grain traits of current and a number of earlier chickpea, faba bean, field pea, lentil, lupin and mungbean varieties grown in Australia.

The details provided in this publication for each pulse variety are:

- year of release
- seed weight, expressed as grams per 100 seeds
- seed coat colour (for field peas, lentils and mungbeans)
- seed shape (for lentils)
- primary production regions.

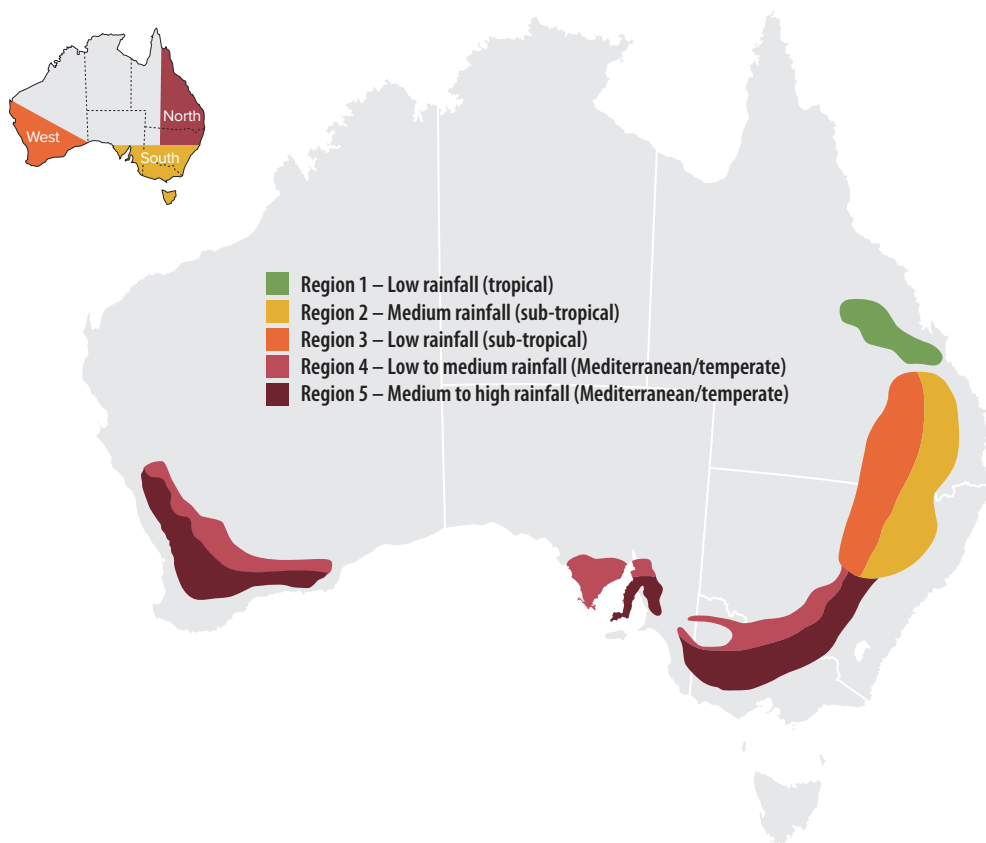
⁽¹⁾ indicates that a variety is protected by Plant Breeder's Rights (PBR).

Pulse variety production regions used in this publication are:

North – regions 1, 2 and 3 in Queensland and New South Wales

South – regions 4 and 5 in New South Wales, Victoria and South Australia

West – regions 4 and 5 in Western Australia



Pulse breeding

The Grains Research and Development Corporation (GRDC), in collaboration with government agencies, is investing in the capacity and capability of pulse breeding programs to deliver improved, high value pulse varieties to Australian growers.

These breeding programs include:

- chickpeas – New South Wales Department of Primary Industries
- faba beans – led by The University of Adelaide (Southern Region), in collaboration with The University of Sydney (Northern Region)
- field peas – Victorian Department of Energy, Environment and Climate Action
- lentils – Victorian Department of Energy, Environment and Climate Action
- mungbeans – Queensland Department of Agriculture and Fisheries

Australian Grain Technologies (AGT) is an Australian plant breeding company that breeds wheat, barley, durum, lupin and canola varieties. AGT has been improving the lupin germplasm received under licence from the WA Department of Primary Industries and Regional Development and GRDC. It has applied cutting edge DNA-based genomic selection, advanced statistics and robotics, expanded trait development and fast-tracked the seed production of improved lupin varieties that will deliver greater returns to growers.

AgriVentis Technologies is an agricultural seed technology and development company, bringing together intellectual property (IP) advancements to full commercialisation. The company is developing varieties that have higher yields, better disease resistance, lower cultivation costs, lower water requirements and GMO-free. AgriVentis now has a range of pulse, oilseed, grains, and spice lines and varieties. (Genetically Modified Organism)

Grains Innovation Australia (GIA) is a private breeding company dedicated to the development of crop varieties to improve grower profitability and provide whole farm system solutions to benefit regional communities of Australia. GIA has skills and expertise in lentil breeding and commercialisation and has a vertically integrated breeding to market business model to deliver breeding innovations to growers.

Grains Australia

Grains Australia Limited (Grains Australia) is an initiative of the GRDC. Grains Australia generates value for the Australian grains industry by working collaboratively with industry and government to establish priorities across its core functions. <https://grainsaustralia.com.au>

It assesses opportunities and risks, improves connectivity across the industry and between commodities, and develops strategies to enhance the profitability and competitiveness of Australian grain. By bringing together industry functions, Grains Australia services the connection between what the market wants and what the industry can provide, enabling a value exchange between Australian growers and end-users around the world.

Pulse production in Australia

The Australian Export Grains Innovation Centre's (AEGIC) *Australian Pulses* brochure (<https://www.aegic.org.au/australian-grains/pulses/>) provides details of pulse production in Australia, major markets for Australian pulses, programs supporting customers and a snapshot of Australian pulses.

Australian farmers use advanced technology and equipment to produce pulses of the highest quality. Pulses are an important crop in the Australian grains industry, grown throughout the southern, western and northern regions of the Australian grainbelt. Pulses are grown in crop rotations, with cereals and oilseeds, because of their ability to fix nitrogen into the soil and their contribution to sustainable farming practices.

Australia's diverse agro-climatic zones produce a wide array of high-quality pulse grains. In addition to the major pulse crops listed in the table below, other pulses grown in Australia include mungbeans, adzuki beans, cow peas and black beans, and the grain legume vetch.

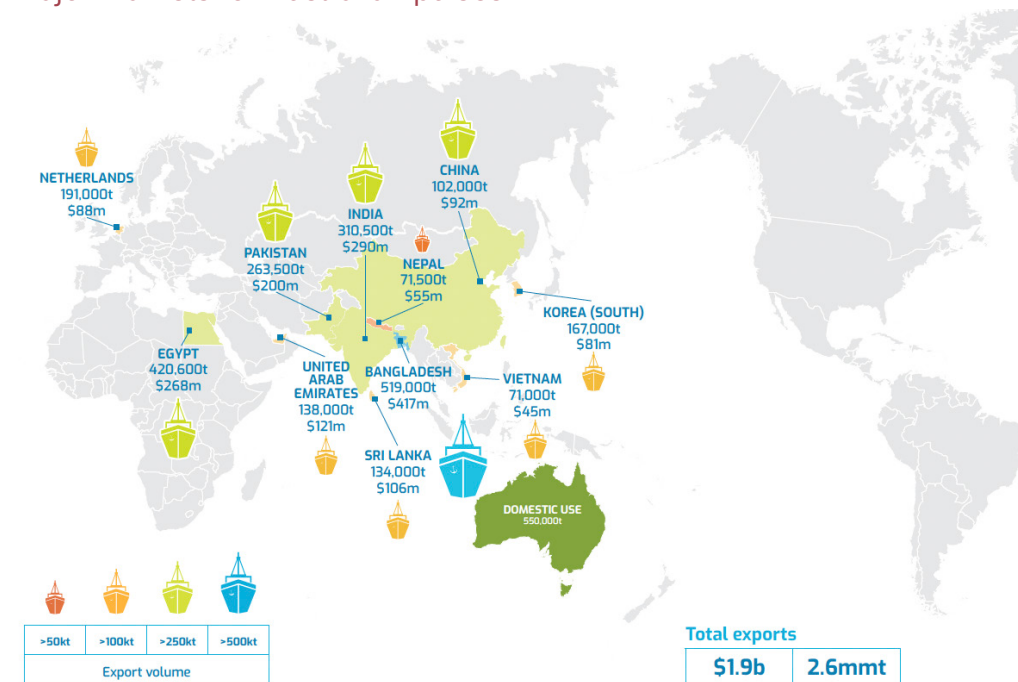
Australia produces an average of over 3 million metric tonnes (mmt) of pulses from more than 2 million hectares. South Australia, Western Australia and Victoria are the largest pulse producing states on average.

Table: Annual production (mmt) (Five year average up to 2022-23)

Pulse	5-yr av. Annual Production (mmt)
Lentils	1.1
Lupins	0.8
Chickpeas	0.65
Faba beans	0.55
Field peas	0.28
TOTAL	3.3

Source: ABARES

Major markets for Australian pulses



Source: ABS 5 year average (2019-2023). Domestic use data: ABARES. Sources: Disclaimer: pulse trading is fragmented across numerous small to medium sized participants, which sometimes may lead to discrepancies between average price estimates.

Acknowledgments

Grains Australia would like to acknowledge the assistance of pulse breeders, their partner seed companies and AEGIC (<https://www.aegic.org.au>) in compiling this publication.

Disclaimer

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Document prepared by Cindy Benjamin on behalf of Grains Australia. Version 1.1

Pulse breeding objectives

CHICKPEA

Chickpea breeders aim to continually improve production through varieties with:

- specific adaptation to agro-climatic regions
- improved agronomics
- improved yield potential
- improved disease resistance

and superior marketing qualities:

- superior seed coat colour
- high splitting efficiency
- large, uniform seed size.



LENTIL

Lentil breeders aim to continually improve production through varieties with:

- improved yield potential
- regional adaptation
- improved disease resistance
- tolerance to salt and boron

and superior marketing qualities:

- bright seed coat colour
- consistent grey seed coat colour
- fast consistent cooking time
- uniform size and efficient splitting.



FABA BEAN

Faba bean breeders aim to continually improve production through varieties with:

- regional adaptation
- improved disease resistance
- high yield potential
- enhanced agronomic traits
- lower anti-nutritional compounds

and superior marketing qualities:

- long grain storage
- sweet tasting
- low moisture content.



LUPIN

Lupin breeders aim to continually improve production through varieties with:

- improved yield potential
- herbicide tolerance

and superior marketing qualities:

- high protein content
- high dehulling efficiency
- low phomopsis
- low alkaloid (bitterness) levels.



FIELD PEA

Field pea breeders aim to continually improve production through varieties with:

- regional adaptation
- improved disease resistance
- high yield potential
- enhanced agronomic traits

and superior marketing qualities:

- long storage life
- sweet taste
- low moisture content.



MUNGBEAN

Mungbean breeders aim to continually improve production in dryland and irrigated systems through varieties with:

- high yield potential
- uniform flowering and maturity
- disease resistance
- enhanced plant architecture

and superior marketing qualities:

- shiny green seed coat
- uniform seed size
- the highest level of food safety.



**Very large
kabuli chickpea
(9–11 mm)**



Kimberley Large^(b)

Released: 2008
Seed weight: 55–65 g/100
Production region: West (Ord)



Macarena

Released: 1984
Seed weight: 50–65 g/100
Production region: North (CQ,
Region 1) and West (Ord)

**Large
kabuli chickpea
(8–10 mm)**



PBA Magnus^(b)

Released: 2020
Seed weight: 42–52 g/100
Production region: South
and North



Kalkee

Released: 2012
Seed weight: 40–50 g/100
Production region: North
and South



Nafice^(b)

Released: 2005
Seed weight: 40–50 g/100
Production region: South



Bumper^(b)

Released: 1998
Seed weight: 40–50 g/100
Production region: North



**Medium
kabuli chickpea
(7–9 mm)**



PBA Royal[Ⓛ]

Released: 2019
Seed weight: 35–45 g/100
Production region: South
and North



PBA Monarch[Ⓛ]

Released: 2013
Seed weight: 35–45 g/100
Production region: South
and North



Genesis™ 114

Released: 2010
Seed weight: 35–45 g/100
Production region: North and
South



Almaz[Ⓛ]

Released: 2005
Seed weight: 35–45 g/100
Production region: South

**Small
kabuli chickpea
(6–8 mm)**



Genesis™ 079

Released: 2010
Seed weight: 20–30 g/100
Production region: South



Genesis™ 425

Released: 2006
Seed weight: 25–35 g/100
Production region: South



Genesis™ 090

Released: 2005
Seed weight: 25–35 g/100
Production region: South



Medium desi chickpea



CBA Captain^(b)

Released: 2020
Seed weight: 20–23 g/100
Production region:
North, South and West



PBA Drummond^(b)

Released: 2018
Seed weight: 21–22 g/100
Production region:
North (CQ, Region 1)



PBA Seamer^(b)

Released: 2016
Seed weight: 22–23 g/100
Production region: North



PBA Maiden^(b)

Released: 2013
Seed weight: 21–25 g/100
Production region: South
and West



Ambar^(b)

Released: 2013
Seed weight: 16–20 g/100
Production region: West
and South



Neelam^(b)

Released: 2013
Seed weight: 16–20 g/100
Production region: West
and South



PBA Striker^(b)

Released: 2012
Seed weight: 21–23 g/100
Production region: South
and West



PBA Boundary^(b)

Released: 2011
Seed weight: 19–22 g/100
Production region: North



PBA Pistol^(b)

Released: 2011
Seed weight: 22–26 g/100
Production region: North
(CQ, Region 1)



PBA HatTrick^(b)

Released: 2009
Seed weight: 19–22 g/100
Production region: North



PBA Slasher^(b)

Released: 2009
Seed weight: 18–22 g/100
Production region:
South and West



Genesis™ 836

Released: 2004
Seed weight: 16–20 g/100
Production region: West and
South



Kyabra^(b)

Released: 2005
Seed weight: 23–27 g/100
Production region: North



Moti^(b)

Released: 2003
Seed weight: 19–21 g/100
Production region: North
(CQ, Region 1)



Jimbour

Released: 2001
Seed weight: 19–21 g/100
Production region: North



**Small
desi chickpea**



Genesis™ 510

Released: 2008
Seed weight: 14–18 g/100
Production region: West



Genesis™ 509

Released: 2008
Seed weight: 14–18 g/100
Production region: South

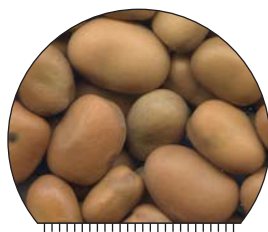


Genesis™ 508

Released: 2005
Seed weight: 14–18 g/100
Production region: South



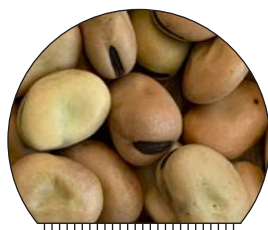
Small faba bean



Doza^(b)

Released: 2008
Seed weight: 40–60 g/100
Production region: North

Medium faba bean



FBA Ayla^(b)

Released: 2021
Seed weight: 51–68 g/100
Production region: North



PBA Amberley^(b)

Released: 2019
Seed weight: 60–84 g/100
Production region: South and West



PBA Nanu^(b)

Released: 2018
Seed weight: 50–80 g/100
Production region: North



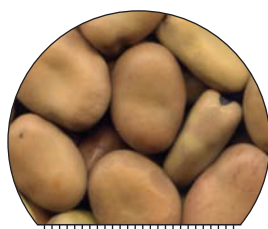
PBA Bendoc^(b)

Released: 2018
Seed weight: 50–72 g/100
Production region: South and West



PBA Marne^(b)

Released: 2018
Seed weight: 61–87 g/100
Production region: South and West



PBA Nasma^(b)

Released: 2015
Seed weight: 50–80 g/100
Production region: North



PBA Samira^(b)

Released: 2014
Seed weight: 55–75 g/100
Production region: South and West



PBA Warda^(b)

Released: 2012
Seed weight: 50–70 g/100
Production region: North



Nura^(b)

Released: 2006
Seed weight: 50–70 g/100
Production region: South and West



Cairo^(b)

Released: 2004
Seed weight: 50–70 g/100
Production region: North



Medium faba bean



Farah⁽¹⁾

Released: 2004
Seed weight: 55–75 g/100
Production region: South and
West



Fiesta VF

Released: 1998
Seed weight: 55–75 g/100
Production region: South

Large faba bean



PBA Zahra⁽¹⁾

Released: 2015
Seed weight: 62–86 g/100
Production region: South



PBA Rana⁽¹⁾

Released: 2011
Seed weight: 65–85 g/100
Production region: South

Broad bean



PBA Kareema⁽¹⁾

Released: 2009
Seed weight: 130–170 g/100
Production region: South



Aquadulce

Released: 1980s
Seed weight: 110–150 g/100
Production region: South

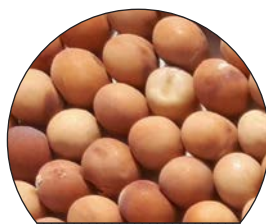


**Rounded dun
(Kaspa-type)
field pea**



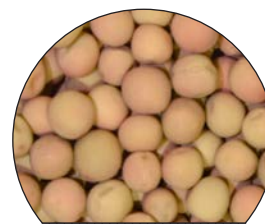
APB Bondi[®]

Released: 2023
Seed weight: 18.5–21 g/100
Coat colour: reddish-brown
Production region: South



GIA Kastar[®]

Released: 2020
Seed weight: 17–25 g/100
Coat colour: red-brown
Production region: South and West



PBA Taylor[®]

Released: 2021
Seed weight: 20–26 g/100
Coat colour: pale brown
Production region: West and South



PBA Butler[®]

Released: 2017
Seed weight: 20–26 g/100
Coat colour: pale brown
Production region: West, North and South



PBA Wharton[®]

Released: 2013
Seed weight: 20–26 g/100
Coat colour: pale brown
Production region: South, West and North



PBA Gunyah[®]

Released: 2010
Seed weight: 20–26 g/100
Coat colour: pale brown
Production region: South and West



PBA Twilight[®]

Released: 2010
Seed weight: 20–26 g/100
Coat colour: pale brown
Production region: South and West



Kaspa[®]

Released: 2002
Seed weight: 20–26 g/100
Coat colour: pale brown
Production region: South and West

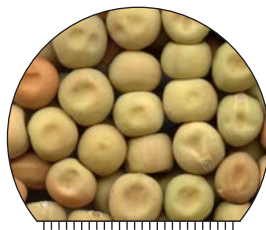


Dimpled dun field pea



GIA Ourstar^(b)

Released: 2020
Seed weight: 19–27 g/100
Coat colour: green-tan
Production region: South and West



PBA Coogee^(b)

Released: 2013
Seed weight: 22–27 g/100
Coat colour: brown-green
Production region: North



PBA Percy^(b)

Released: 2011
Seed weight: 20–26 g/100
Coat colour: brown-green
Production region: South and North



PBA Oura^(b)

Released: 2011
Seed weight: 18–25 g/100
Coat colour: brown-green
Production region: South and North



Yarrum

Released: 2004
Seed weight: 20–26 g/100
Coat colour: brown-green
Production region: North



Parafield

Released: 1999
Seed weight: 21–27 g/100
Coat colour: brown-green
Production region: South



Morgan^(b)

Released: 1998
Seed weight: 16–22 g/100
Coat colour: brown-green
Production region: South



White field pea



PBA Pearl^(b)

Released: 2012
Seed weight: 20–26 g/100
Coat colour: white
Production region: South, West and North



SW Celine^(b)

Released: 2008
Seed weight: 20–27 g/100
Coat colour: white
Production region: South and North



Bundi

Released: 2007
Seed weight: 20–28 g/100
Coat colour: white
Production region: South



Sturt

Released: 2006
Seed weight: 17–24 g/100
Coat colour: white
Production region: South and North

Blue-seeded field pea



PBA Noosa^(b)

Released: 2021
Seed weight: 20–26 g/100
Coat colour: blue-green
Production region: South



Maki

Released: 2008
Seed weight: 20–26 g/100
Coat colour: blue-green
Production region: North



Excell

Released: 2000
Seed weight: 20–26 g/100
Coat colour: blue-green
Production region: South



Jupiter

Released: 1990s
Seed weight: 28–34 g/100
Coat colour: white
Production region: South



Large green lentil



PBA Giant^{db}

Released: 2014
Seed weight: 6.5–7.5 g/100
Coat colour: green
Shape: lens
Production region: South



Boomer^{db}

Released: 2008
Seed weight: 6.0–7.0 g/100
Coat colour: green
Shape: lens
Production region: South

Medium green lentil

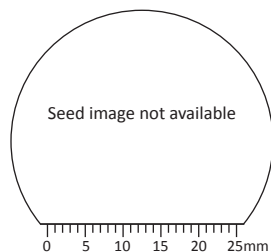


PBA Greenfield^{db}

Released: 2014
Seed weight: 5.0–6.0 g/100
Coat colour: green
Shape: lens
Production region: South



Small red lentil



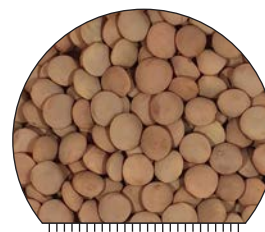
ALB Terrier⁽¹⁾

Released: 2023
Production region: South



GIA Lightning⁽¹⁾

Released: 2022
Seed weight: 3.0–4.0 g/100
Coat colour: grey
Shape: round
Production region: South and West



GIA Thunder⁽¹⁾

Released: 2022
Seed weight: 3.0–4.0 g/100
Coat colour: grey
Shape: round
Production region: South and West



GIA Sire⁽¹⁾

Released: 2022
Seed weight: 2.8–3.8 g/100
Coat colour: grey
Shape: round
Production region: South and West



PBA HighlandXT⁽¹⁾

Released: 2019
Seed weight: 3.4–4.5 g/100
Coat colour: grey
Shape: lens
Production region: South



PBA HurricaneXT⁽¹⁾

Released: 2013
Seed weight: 3.0–4.0 g/100
Coat colour: grey
Shape: round
Production region: South



PBA Herald XT⁽¹⁾

Released: 2011
Seed weight: 2.5–3.5 g/100
Coat colour: grey
Shape: lens
Production region: South



PBA Bounty⁽¹⁾

Released: 2009
Seed weight: 3.0–4.0 g/100
Coat colour: grey
Shape: round
Production region: South



Nipper⁽¹⁾

Released: 2008
Seed weight: 2.5–3.5 g/100
Coat colour: grey
Shape: round
Production region: South



Northfield

Released: 1994
Seed weight: 2.5–3.5 g/100
Coat colour: tan
Shape: round
Production region: South



Medium red lentil



0 5 10 15 20 25mm

GIA Leader⁽¹⁾

Released: 2020
Seed weight: 4.0–5.0 g/100
Coat colour: grey
Shape: lens
Production region: South



0 5 10 15 20 25mm

PBA Hallmark XT⁽¹⁾

Released: 2018
Seed weight: 3.6–4.6 g/100
Coat colour: grey
Shape: lens
Production region: South



0 5 10 15 20 25mm

PBA Bolt⁽¹⁾

Released: 2012
Seed weight: 4.0–5.0 g/100
Coat colour: grey
Shape: lens
Production region: South



0 5 10 15 20 25mm

PBA Ace⁽¹⁾

Released: 2012
Seed weight: 4.0–5.0 g/100
Coat colour: grey
Shape: lens
Production region: South



0 5 10 15 20 25mm

PBA Blitz⁽¹⁾

Released: 2010
Seed weight: 4.5–5.5 g/100
Coat colour: grey
Shape: lens
Production region: South



0 5 10 15 20 25mm

PBA Flash⁽¹⁾

Released: 2009
Seed weight: 4.0–5.0 g/100
Coat colour: green
Shape: lens
Production region: South



0 5 10 15 20 25mm

Nugget

Released: 1999
Seed weight: 3.8–4.8 g/100
Coat colour: grey
Shape: lens
Production region: South



0 5 10 15 20 25mm

Digger

Released: 1993
Seed weight: 3.5–4.5 g/100
Coat colour: grey
Shape: lens
Production region: South

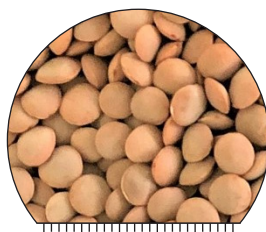


Large red lentil



GIA Metro[®]

Released: 2023
Seed weight: 4.3–5.3 g/100
Coat colour: grey
Shape: lens
Production region: South and West



PBA KelpieXT[®]

Released: 2020
Seed weight: 4.2–5.1 g/100
Coat colour: grey
Shape: lens
Production region: South



PBA Jumbo2[®]

Released: 2014
Seed weight: 4.5–5.5 g/100
Coat colour: grey
Shape: lens
Production region: South



PBA Jumbo[®]

Released: 2010
Seed weight: 4.5–5.5 g/100
Coat colour: grey
Shape: lens
Production region: South



Aldinga

Released: 1993
Seed weight: 4.5–5.5 g/100
Coat colour: green
Shape: lens
Production region: South



Australian sweet lupin



Rosemont^(b)

Released: 2023
Seed weight: 11–18 g/100
Production region: West and South



Lawler^(b)

Released: 2022
Seed weight: 11–18 g/100
Production region: North and South



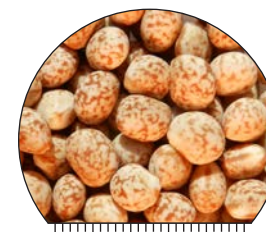
Coyote^(b)

Released: 2019
Seed weight: 11–18 g/100
Production region: West and South



PBA Bateman^(b)

Released: 2017
Seed weight: 14 g/100
Production region: North and South



PBA Leeman^(b)

Released: 2017
Seed weight: 14–15 g/100
Production region: West



PBA Jurien^(b)

Released: 2015
Seed weight: 10–17 g/100
Production region: West and South



PBA Barlock^(b)

Released: 2013
Seed weight: 10–16 g/100
Production region: West and South



PBA Gunyidi^(b)

Released: 2011
Seed weight: 10–16 g/100
Production region: West and South



Jenabillup^(b)

Released: 2007
Seed weight: 9–17 g/100
Production region: West and South



Coromup^(b)

Released: 2006
Seed weight: 10–18 g/100
Production region: West and South



Mandelup^(b)

Released: 2005
Seed weight: 9–17 g/100
Production region: West and South



Jindalee

Released: 2001
Seed weight: 8–14 g/100
Production region: South



Quilinock^(b)

Released: 2001
Seed weight: 9–17 g/100
Production region: West



Tanjil^(b)

Released: 1999
Seed weight: 8–14 g/100
Production region: West



Wonga^(b)

Released: 1998
Seed weight: 8–14 g/100
Production region: West and South



Australian albus lupin



Murringod^(b)

Released: 2017
Seed weight: 23–42 g/100
Production region: South



Amira^(b)

Released: 2012
Seed weight: 22–42 g/100
Production region: West



Andromeda^(b)

Released: 2005
Seed weight: 21–40 g/100
Production region: West



Luxor^(b)

Released: 2005
Seed weight: 23–42 g/100
Production region: South



Rosetta

Released: 2005
Seed weight: 23–43 g/100
Production region: South



Kiev Mutant

Released: 1970s
Seed weight: 23–44 g/100
Production region: South



Large-seeded shiny green mungbean



Kookaburra^(b)

Released: 2025
Seed weight: 6.6–8.8 g/100
Coat colour: shiny green
Production region: North
(Regions 2 & 3 ONLY)



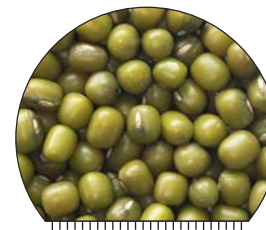
Brolga^(b)

Released: 2025
Seed weight: 6.6–9.2 g/100
Coat colour: shiny green
Production region: North



Green Taipan^(b)

Released: 2023
Seed weight: 7.08 g/100
Coat colour: shiny green
Production region: North



Opal-AU^(b)

Released: 2020
Seed weight: 6.0–8.2 g/100
Coat colour: shiny green
Production region: North



Jade-AU^(b)

Released: 2013
Seed weight: 6.2–8.4 g/100
Coat colour: shiny green
Production region: North



Crystal^(b)

Released: 2008
Seed weight: 5.8–8.6 g/100
Coat colour: shiny green
Production region: North



Berken

Released: 1975
Seed weight: 5.4–9.2 g/100
Coat colour: shiny green
Production region: North



Small-seeded shiny green mungbean



Celera II-AU^(b)

Released: 2014
Seed weight: 3.2–5.2 g/100
Coat colour: shiny green
Production region: North

Large-seeded dull green mungbean



Satin II^(b)

Released 2008
Seed weight: 5.8–9.0 g/100
Coat colour: dull green
Production region: North

Black gram (Mungo)



Onyx-AU^(b)

Released: 2017
Seed weight: ≈ 6.0 g/100
Coat colour: black
Production region: North



Regur

Released: 1975
Seed weight: 5.4–5.6 g/100
Coat colour: black
Production region: North





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