

Chickpea – notes and NVT entries 2020

November 2020

Notes on main varieties and lines

Desi

PBA Boundary. Released by Pulse Breeding Australia (PBA) in 2011. Suitable for northern NSW and southern Qld in paddocks with a low risk of phytophthora root rot (PRR) (e.g. no known history of the disease and not prone to waterlogging). MS to ascochyta blight (AB) in the north, but S in the south, VS to PRR. Higher yielding (3%) than PBA HatTrick and Jimbour in northern NSW.

PBA HatTrick. From PBA. MR to PRR. MS to AB in the north and S in the south. Medium-seeded line released in 2009 as a replacement for all current varieties in northern NSW and southern Qld.

PBA Maiden. Released in 2013 from PBA. Southern adapted variety with early to midflowering and maturity. S to AB in the south and MS in the north. VS to PRR, so not suited to northern NSW. Large seed targeted for whole seed markets.

PBA Seamer. Released by PBA in 2016. Suitable for central and northern NSW. MR to AB in the north and MR to PRR. Similar yielding to PBA HatTrick in the absence of disease, but significantly higher in the presence of AB. Semi-erect plant type with good lodging resistance at maturity. Early to mid-flowering and mid-maturity. It is not considered an option for southern NSW where other current varieties are higher yielding.

PBA Slasher. From PBA. MS to AB in the north. VS to PRR, so not suited to northern NSW. Medium-seeded line. Superior yield to all other varieties in the south.

Kyabra. Released variety (Qld). S to PRR, VS to AB in both the north and south. Tall, lodging resistant and high yielding variety with large seeds highly preferred for the whole seed market.

PBA Striker. From PBA. Southern adapted variety with earlier flowering and earlier maturity than PBA Slasher. S to AB in the south. VS to PRR, so not suited to northern NSW. Medium to large seeded variety. High yielding in short season environments.

PBA Drummond. High yielding in central QLD and limited testing in northern NSW in 2018 and 2019. S to AB in the north and south. S to PRR. An erect plant type with a medium seed size.

Neelam. Released by DAFWA/COGGO in 2011. S to AB in the south and the north. VS to PRR, so not suited to northern NSW. Small to medium-seeded. Neelam has similar yields to PBA Slasher with medium plant height.

Planned release spring 2020

CBA Captain (coded CICA1521). Broadly adapted and high yielding in northern, central and southern NSW. MS to AB in the north and S in the south. MR to PRR. An erect plant type, early to midflowering and maturity with medium seed size.



Kabuli

Genesis™ 090. Released variety (Victoria). Introduction from ICARDA and licensed to PB Seeds. VS to PRR. R-MR in the north to AB. High yielding, small-seeded (mainly 7-8 mm grades) variety potentially well suited to southern NSW. Might provide a premium over desi types in some seasons.

Almaz. Released variety (WA). Originally breeding line from ICARDA. VS to PRR. MS in the north to A. Medium to large seeded (mainly 9 mm grades). May be suitable for southern NSW and northern areas where there is a low risk of PRR.

Genesis Kalkee. Formerly known as Genesis 115. Licensed to PB Seeds. VS to PRR. MS to AB in the north and south. Large seed mainly 9-10 mm grades A tall erect variety more suited to irrigation areas of southern NSW and northern areas where there is a low PRR risk.

PBA Monarch. Released in 2013 from PBA. (S) to PRR. MS to AB in the south and the north. Early flowering and early maturing (earlier than Genesis 090) and higher yielding than Almaz and Genesis Kalkee. Medium seeded (mainly 8 and 9 mm grades). Suited to southern and northern areas where there is a low PRR risk.

PBA Royal. Released in 2018. Higher yielding to Almaz in northern NSW but similar to Genesis™ 090 in the south. MR to AB in the north. Early to mid-flowering and maturity. Semi spreading plant type similar to Genesis™ 090. Seed size mostly 8 mm and larger than Genesis™ 090.

Planned release spring 2020

PBA Magnus (coded CICA1352). Licensed to PB Seeds. VS to PRR. Large seed, mainly 9-10 mm grades. MS to AB in the north and MS in the south. A semi-erect variety more suited to irrigation areas of southern NSW and northern areas where there is a low PRR risk.

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Chickpea yield performance 2015–2019. **Northern Region**

•	Yield - % of PBA HatTrick	
	East	West
	1.69 t/ha	1.48 t/ha
Desi types		
Kyabra	103 (12)	101 (26)
PBA Boundary	105 (12)	104 (26)
PBA Drummond		
PBA HatTrick	100 (12)	100 (26)
PBA Seamer	106 (14)	106 (26)
CBA Captain	112 (12)	112 (26)
	Yield - %	Almaz
	Yield - % East	Almaz West
Kabuli types	East	West
Kabuli types Almaz	East	West
	East 2.20 t/ha	West 1.30 t/ha
Almaz	East 2.20 t/ha	West 1.30 t/ha 100 (13)
Almaz Genesis™ 090	East 2.20 t/ha 100 (7) 102 (7)	West 1.30 t/ha 100 (13) 114 (13)
Almaz Genesis™ 090 Genesis™ Kalkee	East 2.20 t/ha 100 (7) 102 (7) 96 (7)	West 1.30 t/ha 100 (13) 114 (13) 93 (13)

Chickpea yield performance 2015–2019. Southern Region

_	Yield - % of PBA Slasher	
	East	West
	1.40 t/ha	1.70 t/ha
Desi types		
Neelam	98 (7)	96 (4)
PBA Boundary	90 (7)	89 (4)
PBA HatTrick	93 (7)	91 (4)
PBA Maiden	94 (7)	96 (4)
PBA Slasher	100 (7)	100 (4)
PBA Striker	97 (7)	101 (4)
CBA Captain	104 (6)	103 (3)
	Yield - % Genesis™ 090	
	East	West
	1.62 t/ha	n.d.
Kabuli types		
Almaz	92 (5)	n.d.
Genesis™ 090	100 (5)	n.d.
Genesis™ Kalkee	90 (5)	n.d.
PBA Monarch	95 (5)	n.d.
PBA Royal	95 (5)	n.d.
PBA Magnus	98 (5)	n.d.

Note: Yields are a combined across sites analysis using NVT and PBA data.

More information

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