

## Woods Seeds Field Day Notes

September 2020, prepared by NSW DPI

### Take home message

CICA1521 is a broadly adapted desi chickpea variety for the northern region, to be released in spring 2020. CICA1521 (to be named) has higher yields in northern NSW and southern QLD than PBA HatTrick<sup>®</sup>. It has a medium seed size and is expected to have similar disease ratings to PBA HatTrick<sup>®</sup>.


### Significant yield advantage over PBA HatTrick<sup>®</sup>

CICA1521 National Variety Trials (NVT) data is now publicly available at [www.nvtonline.com.au](http://www.nvtonline.com.au).

CICA1521 has shown great consistency and yields higher than Kyabra<sup>®</sup>, PBA Boundary<sup>®</sup>, PBA HatTrick<sup>®</sup> and PBA Seamer<sup>®</sup> in SW QLD (Table 1). In NW NSW it has consistent yield gains over PBA HatTrick<sup>®</sup>

**Table 1.** Long term yield (2015-2019) of CICA1521 and current chickpea varieties, expressed as a % of the mean yield, in NVT in south west QLD.

Source: <https://app.nvtonline.com.au/lty/table/chickpedesi/qld/swq/?lty-type=yield>

		Yield group (t/ha)				
		1	1.5	2	2.5	3.5
	Mean yield (t/ha)	0.61	1.34	1.74	2.38	3.05
<b>Variety</b>	No trials in total & for each yield group	2	3	3	2	3
<b>CICA1521</b>	<b>13</b>	<b>112</b>	<b>109</b>	<b>104</b>	<b>107</b>	<b>109</b>
Kyabra <sup>®</sup>	13	96	106	97	101	103
PBA Boundary <sup>®</sup>	13	103	102	101	101	101
PBA Drummond <sup>®</sup>	4	121	115		112	
PBA HatTrick <sup>®</sup>	13	95	97	98	97	96
PBA Seamer <sup>®</sup>	13	103	98	102	100	100

**Table 2.** Long term yield (2015-2019) of CICA1521 and current chickpea varieties, expressed as a % of the mean yield, in NVT in north west NSW.

Source: <https://app.nvtonline.com.au/lty/table/chickpea-desi/nsw/nw/?lty-type=yield>

GRDC NATIONAL VARIETY TRIALS		Yield group (t/ha)					
		0.5	1	1.5	2	2.5	3.5
	Mean yield (t/ha)	0.41	0.88	1.23	1.84	2.25	2.96
<b>Variety</b>	No trials in total & for each yield group	1	8	4	6	4	2
<b>CICA1521</b>	<b>25</b>	<b>106</b>	<b>110</b>	<b>110</b>	<b>107</b>	<b>107</b>	<b>105</b>
Kyabra <sup>Ⓞ</sup>	25	140	115	107	92	94	80
PBA Boundary <sup>Ⓞ</sup>	25	114	108	104	99	99	92
PBA Drummond <sup>Ⓞ</sup>	6	98	113	116	115		
PBA HatTrick <sup>Ⓞ</sup>	25	105	99	97	96	96	93
PBA Seamer <sup>Ⓞ</sup>	25	83	95	98	104	103	109

### Ascochyta blight

CICA1521 is likely to have a Moderately Susceptible ascochyta blight (AB) rating in the northern region. This is similar to PBA HatTrick<sup>Ⓞ</sup>, less than PBA Seamer<sup>Ⓞ</sup> (rated as Moderately resistant) and provides a lower ascochyta blight disease risk than PBA Drummond (rated as Susceptible).

### Phytophthora root rot

NVT pulse disease rating testing is being conducted for PRR for the first time. It is expected that a review of all variety ratings for PRR will be conducted to align with the NVT disease rating definitions. CICA1521 has performed similarly to PBA HatTrick<sup>Ⓞ</sup>.

### Phenology and other agronomic traits

CICA1521 is early flowering when sown in the mid-May to mid-June sowing window, approximately six days earlier than PBA HatTrick<sup>Ⓞ</sup>. When sown in early May it can flower up to 24 days earlier than PBA HatTrick<sup>Ⓞ</sup>. CICA1521 day to first pod is similar to current varieties and has early to mid-maturity, earlier than PBA HatTrick<sup>Ⓞ</sup>. CICA1521 has an erect plant type with good height to lowest pod and plant height



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### **Grain quality**

CICA1521 has a yellow-brown seed coat and angular seed shape, not unlike PBA HatTrick<sup>®</sup>. The seed size of CICA1521 is larger than PBA HatTrick<sup>®</sup>, similar to PBA Seamer<sup>®</sup> and PBA Drummond<sup>®</sup> but smaller than Kyabra<sup>®</sup>.

### **Acknowledgements**

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