

# PBA Oura<sup>®</sup>

## Erect 'dun type' field pea

The information in this document is current as at September 2011.  
For updated information after this date, please refer to NVT results

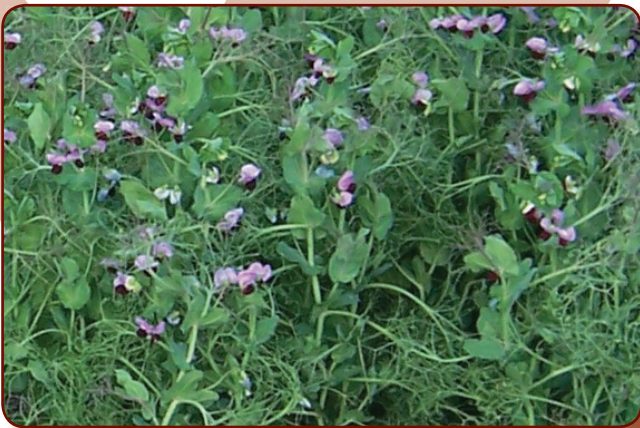


# PBA

PULSE BREEDING AUSTRALIA

*Better pulse varieties faster*

## Resistant to bacterial blight



### KEY FEATURES

- Low risk option for bacterial blight
- High yield potential and broad adaptation
- Early to mid flowering and maturing
- Erect growing, semi-leafless plant type
- Early maturity allows crop topping
- Grain marketable as 'Australian dun type'

### MAIN ADVANTAGES

PBA Oura<sup>®</sup> (tested as OZP0703) and PBA Percy<sup>®</sup> (tested as OZP0901) are being released concurrently to provide growers with superior field pea options in bacterial blight prone regions.

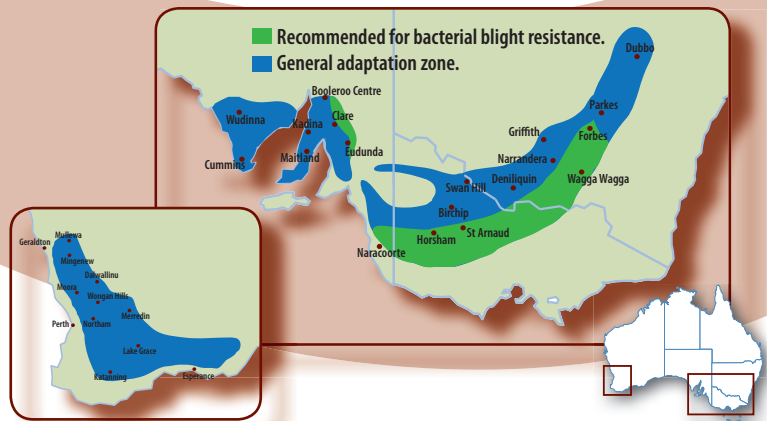
Both varieties have high yield potential, are broadly adapted and perform relatively well in short growing seasons and low rainfall climates.

PBA Oura<sup>®</sup> and PBA Percy<sup>®</sup> have good levels of resistance to bacterial blight, showing minimal yield loss in trials subjected to high levels of bacterial blight pressure.

These varieties provide growers with the option of growing either an erect semi-dwarf type (PBA Oura<sup>®</sup>) or a conventional type (PBA Percy<sup>®</sup>) to suit on farm practices.

Both varieties are early flowering and maturing and better suited for crop topping than Kaska<sup>®</sup>. Both produce Australian dun type grain suitable for human consumption export or stockfeed markets.

### AREA OF ADAPTATION



PBA Oura<sup>®</sup> is broadly adapted across all the major field pea production regions and will provide a significant advantage to growers in regions prone to bacterial blight.

### SEED PROTECTION & ROYALTIES

PBA Oura<sup>®</sup> is protected under Plant Breeder's Rights (PBR) legislation. Growers can only retain seed from their production of PBA Oura<sup>®</sup> for their own seed use.

An End Point Royalty (EPR) of \$2.86 per tonne (GST inclusive), which includes breeder royalties, applies upon delivery of this variety.

Seed is available from the commercial partner Seednet.

**Seednet**  
Planting Productivity

### YIELD & ADAPTATION

PBA Oura<sup>®</sup> is broadly adapted (e.g. similar to PBA Gonyah<sup>®</sup>), is relatively earlier flowering and more reliable in shorter and lower rainfall growing seasons (e.g. compared to Kaska<sup>®</sup> and Parafield).

The main yield advantage of PBA Oura<sup>®</sup> will be within regions prone to bacterial blight.

Notably PBA Oura<sup>®</sup> will be the first low risk semi-dwarf field pea variety option for these regions.

#### Long term mean yields 2006 to 2010 expressed as a % of Kaska<sup>®</sup> yield

Representative growing season	Drought	Short Season			Medium Season		Long Season	
No. of experiments	18	35	26	23	22	17	19	
Trial group*	<0.5 t/ha	0.5-1.0 t/ha	1.0-1.5 t/ha	1.5-2.0 t/ha	2.0-2.5 t/ha	2.5-3.0 t/ha	>3.0 t/ha	
Mean Kaska <sup>®</sup> yield (t/ha)	0.33	0.71	1.22	1.81	2.26	2.72	3.50	
<b>Short season variety options</b>								
Parafield	147	104	98	96	92	90	88	
PBA Twilight <sup>®</sup>	151	127	114	105	105	94	96	
Sturt <sup>®</sup>	187	128 <sup>(28)</sup>	107 <sup>(19)</sup>	107 <sup>(19)</sup>	104 <sup>(18)</sup>	98 <sup>(14)</sup>	95 <sup>(11)</sup>	
<b>Short to mid season variety options</b>								
PBA Oura <sup>®</sup>	197	127	115	111	107	100	98	
PBA Percy <sup>®</sup>	NT	127 <sup>(10)</sup>	122 <sup>(2)</sup>	103 <sup>(9)</sup>	107 <sup>(9)</sup>	101 <sup>(11)</sup>	99 <sup>(12)</sup>	
PBA Gonyah <sup>®</sup>	145	125	112	109	106	97	98	
<b>Mid to long season variety options</b>								
Yarrum <sup>®</sup>	97	116	114 <sup>(22)</sup>	109 <sup>(22)</sup>	112 <sup>(19)</sup>	103 <sup>(16)</sup>	102 <sup>(18)</sup>	
Kaska <sup>®</sup>	100	100	100	100	100	100	100	

	Varieties have optimal adaptation
	Varieties have general adaptation
	Varieties have sub-optimal adaptation

NT: Insufficient comparisons

( ) Indicates number of experiments if different

\* Based on relative yield of cv Kaska<sup>®</sup>.

**SOURCE:** Trial results from Pulse Breeding Australia (PBA) and National Variety Trials (NVT) programs.



Bacterial blight on pea stipules.

Note the fan like pattern of the blight.

#### High bacterial blight disease pressure trials at Wagga Wagga, NSW 2006 to 2009

	Yield Loss	Mean (%)	Range (%)	Disease rating
<b>Low risk variety options</b>				
PBA Percy <sup>®</sup>	7	<10%		R
PBA Oura <sup>®</sup>	12	10-20%		MR
Parafield	15	10-20%		MR
<b>Moderate to High risk variety options</b>				
Yarrum <sup>®</sup>	20	20-30%		MS
Morgan <sup>®</sup>	21	20-30%		MS
Sturt <sup>®</sup>	27	20-30%		MS
<b>High risk variety options</b>				
PBA Gonyah <sup>®</sup>	31	>30%		S
PBA Twilight <sup>®</sup>	38	>30%		S
SW Celine <sup>®</sup>	37	>30%		S
Excell	39	>30%		S
Kaska <sup>®</sup>	41	>30%		S

Yield loss was calculated from differences between un-inoculated and inoculated bacterial blight plot treatments

**SOURCE:** Pulse Breeding Australia, Wagga Wagga Agricultural Institute, NSW-DPI.

#### Bacterial blight variety resistance



PBA Oura<sup>®</sup>

Kaska<sup>®</sup>

**SOURCE:** Pulse Breeding Australia - Horsham;

Bacterial blight field screening nursery, 2006, DPI Victoria.

### AGRONOMY

Growers should follow the same sowing, harvest and weed management recommendations for other semi-dwarf varieties (i.e. Kaska<sup>®</sup>) in their region to achieve optimal yields. PBA Oura<sup>®</sup> allows more flexibility to delay sowing and to crop top late in the season compared to later flowering semi-dwarf varieties such as Kaska<sup>®</sup>.

- Vigorous early and erect-early plant growth.
- Medium plant height and semi-leafless.
- Early and long flowering duration.
- Fair to good lodging and pod shatter resistance at maturity.
- Early maturing: suitable for crop-topping in long seasons.

Variety	Plant habit	Plant vigour, early season	Flowering time	Maturity time	Plant lodging, at maturity	Pod shattering, at maturity
<b>Kaska type</b>						
Kaska <sup>®</sup>	SD-SL	High	Late	Mid	Fair-Good	R (SP)
PBA Twilight <sup>®</sup>	SD-SL	High	Early	Early	Fair-Good	R (SP)
PBA Gonyah <sup>®</sup>	SD-SL	High	Early-Mid	Early	Fair-Good	R (SP)
<b>Australian dun type</b>						
PBA Oura <sup>®</sup>	SD-SL	High	Early-Mid	Early	Fair-Good	MR (NSP)
PBA Percy <sup>®</sup>	C	High	Early	Early	Poor	MR (NSP)
Morgan <sup>®</sup>	Tall-SL	High	Late	Late	Poor-Fair	MR (NSP)
Parafield	C	High	Mid	Mid	Poor	MR (NSP)
Yarrum <sup>®</sup>	SD-SL	Fair	Late	Mid	Poor-Fair	MR (NSP)
<b>Niche grain type</b>						
SW Celine <sup>®</sup>	SD-SL	High	Early	Early	Fair-Good	S (NSP)
Sturt <sup>®</sup>	C	High	Early-Mid	Mid	Poor	MR (NSP)
Excell	SD-SL	High	Early-Mid	Late	Good	S (NSP)
Maki <sup>®</sup>	SD-SL	Low	Early	Early	Poor-Fair	S (NSP)

Key: SD=semi-dwarf, C=conventional, SL=semi-leafless, S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistant. SP=sugar pod type pod, NSP=non sugar pod type pod.

### DISEASE MANAGEMENT

PBA Oura<sup>®</sup> is a low risk option for bacterial blight prone regions. Compared to growing Parafield which was previously recommended for these regions, PBA Oura<sup>®</sup> will suffer less late season powdery mildew as it matures earlier.

PBA Oura<sup>®</sup> also shows improved resistance to the Kaska strain of downy mildew present in South Australia.

- Sow within regionally recommended time periods.
- Follow recommended crop rotation practices.
- Avoid sowing disease infected seed.
- Use predictive models to manage blackspot  
e.g. blackspot manager [www.agric.wa.gov.au/cropdisease](http://www.agric.wa.gov.au/cropdisease)
- Use regionally recommended seed and foliar fungicides to control downy mildew and blackspot.
- Follow regional pesticide recommendations for control of pea weevil and native budworm.

Variety	Blackspot (Ascochyta)	Bacterial blight (Field rating)	Downy mildew (Parafield strain)	Downy mildew (Kaska strain)	Powdery mildew	PSbMV*
<b>Kaska type</b>						
Kaska <sup>®</sup>	MS	S	MR	S	S	S
PBA Twilight <sup>®</sup>	MS	S	R	S	S	S
PBA Gonyah <sup>®</sup>	MS	S	R	S	S	S
<b>Australian dun type</b>						
PBA Oura <sup>®</sup>	MS	MR	MR	MS	S	S
PBA Percy <sup>®</sup>	MS	R	S	S	S	S
Morgan <sup>®</sup>	MS	MS	MR	S	S	S
Parafield	MS	MR	S	S	S	S
Yarrum <sup>®</sup>	MS	MS	S	S	R	R
<b>Niche grain type</b>						
SW Celine <sup>®</sup>	MS	S	S	S	S	S
Sturt <sup>®</sup>	MS	MS	MS	S	S	S
Excell	MS	S	MR	S	S	S
Maki <sup>®</sup>	S	S	S	S	R	R

Key: S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistance. \*PSbMV=Pea seed borne mosaic virus.

REFER TO DETAILED INFORMATION AT [www.pulseaus.com.au](http://www.pulseaus.com.au)  
 Ute guides, crop and disease management bulletins

# PBA Oura<sup>®</sup>

## Erect 'dun type' field pea

### GRAIN QUALITY

PBA Oura<sup>®</sup> produces grain with a yellow split.

The whole grain is medium in size (e.g. similar to Kaspera<sup>®</sup>), has a light green uniform colour and is dimpled.

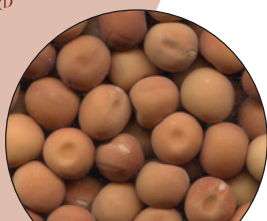
PBA Oura<sup>®</sup> grain is marketable as "Australian dun type" which is exported to the Asian sub-continent for production of dhal and pea flour and also sold for stockfeed.



PBA Oura<sup>®</sup>



PBA Percy<sup>®</sup>



Kaspera<sup>®</sup>

### MARKETING

PBA Oura<sup>®</sup> produces grain that is marketable as 'Australian dun type' for human consumption or stockfeed, similar to Parafield and Yarrum<sup>®</sup>. Australian dun type grain is exported for human consumption to the Indian sub-continent as a source of yellow dhal and to Asian markets for sprouting.

Growers should avoid contamination between different grain types (e.g. "Australian dun type" and "Kaspera type") as they are marketed differently for human consumption.

Specific whole grain attributes of different varieties may also improve grain marketability or attract price premiums from different human consumption markets such as a large grain size (e.g. Parafield and PBA Percy<sup>®</sup>) and a uniform and unblemished green coat colour (e.g. PBA Oura<sup>®</sup>). Grain from conventional field pea varieties (e.g. Parafield, PBA Percy<sup>®</sup>) is preferred for the Asian sprouting market over semi-leafless varieties (e.g. Kaspera<sup>®</sup>, PBA Oura<sup>®</sup>), as these produce more tender vegetable shoots.

### BREEDING

PBA Oura<sup>®</sup> was bred at DPI Victoria - Horsham from a complex crossing program ending in 1996 and following a recurrent selection program for high yield potential, improved plant type and adaptation in low rainfall cropping regions.

PBA Oura<sup>®</sup> was identified with superior field resistance to bacterial blight in disease screening nurseries at Wagga Wagga and Horsham and fast tracked to commercial release by the PBA program.

The variety is named after Oura beach on the Murrumbidgee River near Wagga Wagga, NSW.

### PULSE AGRONOMY

Agronomy and disease management information has been developed with the assistance of the 'Southern region pulse agronomy project' co-funded by GRDC, SARDI, DPI Victoria and NSW-DPI.

Disclaimer: Recommendations have been made from information available to date and considered reliable, and will be updated as further information comes to hand. Readers who act on this information do so at their own risk. No liability or responsibility is accepted for any actions or outcomes arising from use of the material contained in this publication. Reproduction of this brochure in any edited form must be approved by Pulse Breeding Australia © 2011

Version September/2011



## Better pulse varieties faster

PBA is an unincorporated joint venture between the GRDC, University of Adelaide, SARDI, DPI Victoria, NSW-DPI, DEEDI, DAFWA and Pulse Australia. It aims to deliver better pulse varieties faster.

### FOR MORE INFORMATION

#### Pulse Breeding Australia

Brondwen MacLean  
GRDC  
PO Box 5367  
Kingston ACT 2604  
Ph: 02 6166 4500  
b.maclea@grdc.com.au  
www.grdc.com.au/pba

#### PBA Field pea

Tony Leonforte  
DPI Victoria  
Private Bag 260  
Horsham Vic 3400  
Ph: 03 5362 2155  
tony.leonforte@dpi.vic.gov.au

### SEED ENQUIRIES

#### Seednet

#### National Production and Logistics Office

Corner Jeparit Rd & Western Hwy  
PO Box 17, Dimboola Vic 3414  
Ph: 03 5389 0150  
Fax: 03 5389 1121  
admin@seednet.com.au  
www.seednet.com.au



#### Central & Southern NSW

Robert Gill  
Ph: 0428 122 465  
robert.gill@seednet.com.au

#### Victoria & Tasmania

Blair McCormick  
Ph: 0417 891 546  
blair.mccormick@seednet.com.au

#### South Australia & Western Australia

Sam Densley  
Ph: 0417 891 436  
sam.densley@seednet.com.au

Seednet's mission is:

***"To deliver high performance seed based genetics to Australian grain growers and end user customers via superior product and service delivery channels".***

Seednet is proud to partner with Pulse Breeding Australia and invest in the improvement of Australian field pea varieties.

### AGRONOMIC ENQUIRIES

#### Victoria

Jason Brand, DPI Victoria, (03) 5362 2341  
Wayne Hawthorne, Pulse Australia, 0429 647 455

#### South Australia

Mick Lines, SARDI, (08) 8842 6264  
Wayne Hawthorne, Pulse Australia, 0429 647 455

#### New South Wales

Kurt Lindbeck, NSW-DPI, (02) 6938 1608  
Trevor Bray, Pulse Australia, 0428 606 886

#### Western Australia

Ian Pritchard, DAFWA, (08) 9368 3515  
Alan Meldrum, Pulse Australia, 0427 384 760

#### Field pea Blackspot Sowing Guides;

www.agric.wa.gov.au/cropdisease