

KEY FEATURES

- High yield potential, broad adaptation and reliable performance in low rainfall cropping zones.
- Produces medium sized white grain suited to feed and split pea markets.
- Conventional plant type with growth habit similar to Parafield[Ⓟ].
- Early to Mid maturity - suitable for crop-topping.

Breeding and Development

Sturt[Ⓟ] (90-131*27-7) was developed by the Australian Coordinated Field Pea Improvement Program and commercialised in 2003. It was bred at Vic DPI, Horsham and originates from a cross between the Australian variety Laura and Swedish variety Legenda. Sturt was selected for high yields, medium sized grain and high grain splitting efficiency.

Characteristics

Sturt[Ⓟ] has high yield potential and improved reliability of production across a range of cropping zones. Sturt[Ⓟ] is a tall vigorous field pea variety similar to Parafield. It produces uniform medium sized white grain that is suitable for stockfeed or split pea markets. Sturt[Ⓟ] flowers mid season and is slightly earlier maturing compared to Parafield and Kaspa.

Agronomic features & disease resistance

	Seed Type	Leaf Type	Plant height	Relative flowering time	Maturity	Standing at maturity	Pod shatter resistance	Black Spot	Downy mildew	Powdery mildew	*Bacterial Blight (<i>P. Syringae pv. syringae</i>)	Relative seed size (g/100)
Sturt[Ⓟ]	White	C	T	Mid	Mid	Poor	S	S	MS	S	MR-MS	19
Bundi [Ⓟ]	White	SL	M	Early	Early	Fair	R	S	R	MS	S	22
Snowpeak [Ⓟ]	White	SL	M	Early	Early	Good	S	S	R	MS	S	22
SW Celine [Ⓟ]	White	SL	M	Early	Early	Good	S	S	MS-MR	S	S	22
Excell [Ⓟ]	Blue	SL	M	Early-Mid	Mid-Late	Good	VS	S	MR	S	S	22
Parafield [Ⓟ]	Dun	C	T	Mid-Late	Late	Poor	S	S	S	S	MR-MS	23
Kaspa [Ⓟ]	Dun	SL	M	Late	Late	Fair	R	MS-MR	MR	S	S	22

*Bacterial Blight testing is based on screening over the last 2 years for *Pseudomonas syringae pv. syringae* and further screening trials will continue.

Shattering: R = resistant; S = susceptible.

Leaf type: C = conventional, SL = semi-leafless.

Disease ratings: R = resistant; MR = moderately resistant; MS = moderately susceptible; S = susceptible.

Yield and adaptation

Sturt[Ⓟ] has high yield potential across a range of environments. Sturt[Ⓟ] has shown the best relative advantage in the medium to lower rainfall regions and in seasons affected by drought and frost.

National Variety Trials – Long Term Yield as % of Kaspa, data range: 2000 to 2007

	NSW		Vic		SA			
	South-east	South-west	Wimmera	Mallee	Lower EP	Mid North	South East	Yorke P
Sturt[Ⓟ]	99 (59)	103 (27)	100 (18)	104 (34)	100 (11)	98 (27)	98 (17)	94 (15)
Bundi [Ⓟ]	95 (48)	98 (21)	98 (16)	104 (26)	98 (7)	99 (19)	96 (11)	96 (11)
Snowpeak [Ⓟ]	86 (62)	88 (30)	90 (18)	94 (30)	86 (6)	87 (18)	87 (9)	81 (8)
SW Celine [Ⓟ]	103 (7)	105 (5)	102 (3)	103 (5)	103 (5)	100 (6)	100 (6)	96 (6)
Excell [Ⓟ]	86 (32)	87 (16)	86 (19)	87 (33)	86 (8)	85 (21)	85 (12)	83 (11)
Parafield [Ⓟ]	100 (67)	102 (31)	93 (20)	96 (35)	97 (13)	94 (29)	95 (18)	91 (14)
Kaspa [Ⓟ] yield t/ha (100%)	2.37 (66)	1.64 (31)	1.97 (20)	1.56 (30)	2.42 (13)	2.56 (29)	3.11 (18)	2.41 (17)

Numbers in () = site years. Yield data courtesy of Aust Crop Accreditation System – National Variety Trials.

Data also courtesy of SARDI, DPI Vic, NSW DPI before 2005

Management Package

(Consult local grower guides for more detailed information)

Sowing Date and Seeding Rate

- Sowing date is similar to main season conventional type varieties such as Parafield[®] for your district.
- Target 30 – 40 plants/sq mtr – or similar to Parafield[®] for your district. Use higher rates with later sowings.

Herbicide Sensitivity

- Herbicide screening at Wagga NSW (acidic red earths) and Kalkee Vic (black cracking clay) has shown Sturt[®] to be safe with most commonly used registered herbicides at label rates.
- At Minlaton (SA) on highly alkaline grey calcareous loams, Sturt[®] was found to be more susceptible to label application rates of both PSPE and Post emergent metribuzin than Kaspas[®] and Parafield[®]. Over 4 years, yield losses have been up to 10% (PSPE) and 17% (PE – 3 nodes) with label application rates.
- Also at Minlaton (SA) Sturt[®] has shown a similar level of susceptibility as Parafield[®] to the recommended Group B herbicides. Sturt[®] and Parafield[®] incurring up to a 13% yield loss to label applications of Broadstrike[®] compared with 9% in Kaspas[®]. Preliminary data also indicates Sturt and Parafield are more susceptible to Spinnaker[®] and Raptor[®] than Kaspas[®].
- Herbicide tolerance data is available on the NVT website www.nvtonline.com.au

Disease

- Sturt[®] is moderately susceptible to downy mildew and will require a fungicide seed dressing in areas where the disease is a frequent occurrence or in paddocks where downy mildew has been previously identified. Refer to 'Pulse Seed Treatments & Foliar Fungicides 2008' on www.pulseaus.com.au
- Sturt[®] is susceptible to powdery mildew and not recommended for regions where powdery mildew is a common occurrence. Foliar fungicides will be required if grown in regions where this disease is a major problem.
- Sturt[®] is moderately susceptible to bacterial blight, so bacterial blight management strategies will need to be implemented if grown in areas prone to this disease. Refer to 'Preventing Bacterial Blight in Field Peas' on www.pulseaus.com.au
- Sturt[®] will need to be managed for black spot. Refer to 'Strategies for Disease Control in Field Peas' on www.pulseaus.com.au

Harvest

- Sturt[®] is a conventional type pea similar to Parafield[®] and will require rolling after sowing.
- Harvest early (> 12% moisture) to minimise harvest difficulties, shattering losses and cracking of grain.
- Harvest setup will be similar conventional varieties such as Parafield[®].

Grain Quality and Marketing

- Sturt[®] produces medium sized white grain suitable for stockfeed and human consumption markets but primarily be marketed for stockfeed.
- Sturt[®] will likely need to be segregated from dun and blue pea types in markets other than stockfeed.
- Sturt[®] does not have any End Point Levy.

Seed Availability

Seed can be retained for own use only as Sturt[®] is protected by Plant Breeders Rights and any unauthorised commercial propagation, or sale conditioning export, import or stocking of propagating material of this variety is an infringement under the Plant Breeder's rights Act, 1994. All seed has been fumigated for pea weevil, and is certified.



**Auswest Seeds are the marketers of the variety Sturt[®].
Under sub license to PREMIER SEEDS. Phone: 02 68521500.**

Sturt[®] does not have an End Point Levy

Further Information on growing Sturt[®]

- I&I NSW publications: [Winter Crop Variety Sowing Guide](#); [Weed Control in Winter Crops](#); [Insect and Mite Control in Field Crops](#); [Pulse Point Series](#). (www.dpi.nsw.gov.au)
- SARDI fact sheet "Field pea variety sowing guide 2008" (www.sardi.sa.gov.au)
- Vic DPI "Winter Crop Summary 2007" (www.dpi.vic.gov.au).
- Pulse Australia bulletins: "Field pea disease management strategy for southern and western regions 2003, (2006 update)", Pulse Tech-Note Flash "Pulse seed treatments and foliar fungicides 2008" (www.pulseaus.com.au).

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.

This VMP has been jointly prepared by: Trevor Bray and Wayne Hawthorn (Pulse Australia).

Data & information supplied by: Jason Brand (DPI Vic), Larn McMurray (SARDI), Tony Leonforte, (DPI Vic), Eric Armstrong (I&I NSW)

The contribution of the following people to either the extensive field testing, or the production of this publication is gratefully acknowledged: Peter Lockley, Technical Manager, I&I NSW; Jenny Davidson, Plant Pathologist, SARDI.

Reproduction of this VMP in any edited form must be approved by Pulse Australia © 2005.

