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

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

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

<table>
<thead>
<tr>
<th>Variety</th>
<th>Percent Yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sturt®</td>
<td>99 (59)</td>
</tr>
<tr>
<td>Bundi®</td>
<td>95 (48)</td>
</tr>
<tr>
<td>Snowpeak®</td>
<td>86 (62)</td>
</tr>
<tr>
<td>SW Celine®</td>
<td>103 (7)</td>
</tr>
<tr>
<td>Excell®</td>
<td>86 (32)</td>
</tr>
<tr>
<td>Parafield®</td>
<td>100 (67)</td>
</tr>
<tr>
<td>Kaspa®</td>
<td>100%</td>
</tr>
</tbody>
</table>

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 Kalkkee 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 susceptibility to label application rates of both PSPE and Post emergent metribuzin than Kaspa® and Parafied®. 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 Kaspa®. Preliminary data also indicates Sturt and Parafield are more susceptible to Spinnaker® and Raptor® than Kaspa®.

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](http://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](http://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.

Further Information on growing Sturt®

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.

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