SW Celine

White field pea

KEY FEATURES

- High yielding white seeded variety with broad adaptation (see comments in yield section)
- Produces medium to large bright white grain suitable for both feed and split pea markets
- Semi leafless plant type with erect growth habit
- Early maturing variety, suitable for crop-topping in most regions

Breeding and Development

SW Celine® (SW965222) was bred in Sweden, released by Access Genetics and commercialised through Nuseed Pty Ltd.

Characteristics

SW Celine® is a semi-leafless white pea of medium height with erect growth habit and white flowers. It has good early vigour and is early to commence flowering with a short to medium flowering duration with very early maturity making it suitable for crop topping in most regions.

SW Celine® has good lodging resistance at harvest but does not have pod shatter resistance. It produces medium to large size creamy white grain that will be suitable to both human consumption and stockfeed markets. It has shown yield potential across a range of cropping zones in recent trials, but long term comparisons are limited.

Agronomic features & disease resistance

<table>
<thead>
<tr>
<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>
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</thead>
<tbody>
<tr>
<td>SW Celine®</td>
<td>White SL M Early Early Good S S MS-MR S S 22</td>
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<td>Bundi®</td>
<td>White SL M Early Early Fair R S R MS S 22</td>
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<tr>
<td>Snowpeak®</td>
<td>White SL M Early Early Good S S MS S 22</td>
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<tr>
<td>Sturt®</td>
<td>White C T Mid Mid Poor S S MS S MR-MS 19</td>
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<td>Excell®</td>
<td>Blue SL M Early-Mid Mid-Late Good VS S MR S 22</td>
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<tr>
<td>Parafeild®</td>
<td>Dun C T Mid-Late Late Poor S S S S MR-MS 23</td>
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<td>Kaspa®</td>
<td>Dun SL M Late Late Fair R MS-MR MR S S 22</td>
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*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

SW Celine® has had limited evaluation in Australia and has shown yield potential across a range of environments but appears likely to be best suited to medium rainfall situations. There is however still very few site comparisons due to year’s trialled and poor seasonal conditions to enable true consistency with long-term data analysis and this must be taken into account when interpreting the yield results below.

National Variety Trials – Long Term Yield as % of Kaspa, data range: 2000 to 2005

<table>
<thead>
<tr>
<th></th>
<th>NSW</th>
<th>Vic</th>
<th>SA</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>SW Celine®</td>
<td>103 (7)</td>
<td>105 (5)</td>
<td>102 (3)</td>
</tr>
<tr>
<td>Bundi®</td>
<td>95 (48)</td>
<td>98 (21)</td>
<td>98 (16)</td>
</tr>
<tr>
<td>Snowpeak®</td>
<td>86 (62)</td>
<td>88 (30)</td>
<td>90 (18)</td>
</tr>
<tr>
<td>Sturt®</td>
<td>99 (59)</td>
<td>103 (27)</td>
<td>100 (16)</td>
</tr>
<tr>
<td>Excell®</td>
<td>86 (32)</td>
<td>87 (16)</td>
<td>86 (19)</td>
</tr>
<tr>
<td>Parafeild®</td>
<td>100 (67)</td>
<td>102 (31)</td>
<td>93 (20)</td>
</tr>
<tr>
<td>Kaspa® yield t/ha (100%)</td>
<td>2.37 (66)</td>
<td>1.64 (31)</td>
<td>1.97 (20)</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
- Due to its early maturity, avoid sowing SW Celine too early to avoid times of high frost incidence during pod fill, particularly in cooler districts such as the Victorian Wimmera and SA & Vic Mallee.
- Sowing date is similar to other early season varieties such as Bundi, Snowpeak and Excell.
- Target a minimum of 40 plants/sq m or greater relative to local recommendations increasing up to 60 plants/sq m when sown late.

Herbicide Sensitivity
It must be emphasised that crop tolerance and yield responses to herbicides are strongly influenced by seasonal conditions. Seasonal variability therefore makes it essential to validate herbicides on varieties over several seasons.
- In herbicide tolerance screening experiments in the low rainfall years of 2006 & 2007 on high pH alkaline soils at Minlaton (SA), SW Celine performed similarly to Kaspa to label rates of most herbicides recommended in field peas.
- Limited data suggests SW Celine may be more sensitive to Raptor® than Kaspa on these soil types, however further evaluation is required. Herbicide tolerance data is available on the NVT website www.nvtonline.com.au

Disease
- SW Celine is intermediate in its resistance to downy mildew and may 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
- SW Celine is susceptible to powdery mildew and foliar fungicides will be required in regions where this disease is a major problem.
- SW Celine is 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
- SW Celine will need to be managed for black spot. Refer to ‘Strategies for Disease Control in Field Peas’ on www.pulseaus.com.au

Harvest
- Early maturity may require harvest to be timelier to avoid severe pod shattering in areas prone to hot and dry weather. Harvest early (>12% moisture) to minimise the risk of shattering losses and cracking of grain.
- SW Celine is a semi-leafless pea with an erect habit that has shown good stand ability at maturity. Harvesting preparations are likely to be similar to Kaspa.

Grain Quality and Marketing
- SW Celine produces medium to large sized bright white grain suitable for stockfeed and human consumption markets. Market demand for whole white peas for either export or splitting domestically is currently small.
- SW Celine will likely need to be segregated from dun and blue pea types in markets other than stockfeed.

Seed Availability
SW Celine® can only be retained by growers for their own seed as it is a protected by Plant Breeders Rights and any unauthorised commercial, propagation, or any sale conditioning export, import or stocking of propagating material of this variety is an infringement under the PBR Act, 1994.

Nuseed Pty Ltd is the marketer of the variety SW Celine. For seed supply Phone: 1800 993 573

This variety is covered by PBR and attracts an end point royalty of $3.00 per tonne (GST Exclusive).

Further Information on growing SW Celine®
- 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)

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