**HGCA Recommended List® Winter wheat 2015/16**

### MARKET OPTIONS AND GRAIN QUALITY

#### New varieties

- **Skyfall**
- **KWS Trinity**
- **Crusoe**
- **Gallant**
- **Solstice**
- **KWS Lili**
- **Cubanita**
- **Panorama**
- **Cordiale**
- **KWS Cashel**
- **Britannia**
- **Zulu**
- **Delphi**
- **KWS Kielder**
- **Icon**
- **RGT Conversion**
- **Monterey**
- **Invicta**
- **KWS Target**
- **Claire**
- **Scout**
- **Leeds**
- **Twister**
- **Myriad**
- **Revelation**
- **Cougar**
- **Viscount**
- **Horatio**
- **Beluga**
- **Alchemy**
- **Reflection**
- **Evolution**
- **KWS Santiago**
- **Dickens**
- **Costello**
- **Conqueror**
- **KWS Gator**
- **JB Diego**
- **Riley**
- **Quintin**

#### Average LSD (%)

| End-use group | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W | UK | E&W |
|---------------|--------|--------|--------|--------|--------|--------|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|
|                | LSD    | LSD    | LSD    | LSD    | LSD    | LSD    | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD | LSD |
| UK breadmaking |        |        |        |        |        |        | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| UK biscuit, cake-making |        |        |        |        |        |        | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| UK distilling  |        |        |        |        |        |        | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| UK soft wheat for export |        |        |        |        |        |        | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| UK soft wheat for export |        |        |        |        |        |        | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |

#### Grain quality

- **Endosperm texture**
  - Hard
  - Soft
- **Hardness**
  - Hard
  - Medium
  - Soft
- **Protein content (%)**
  - Hard
  - Medium
  - Soft
- **Highland Falling number**
  - Hard
  - Medium
  - Soft
- **Specific weight (light)**
  - Hard
  - Medium
  - Soft
- **Chopin alveograph P/L**
  - Hard
  - Medium
  - Soft
- **Hydrometer reading (%)**
  - Hard
  - Medium
  - Soft
- **Grain quality**
  - Hard
  - Medium
  - Soft
- **Year first listed**
  - 2015
  - 2016
  - 2017

#### Varieties no longer listed:

- Chilton, Cocoon, Dunford, Panacea and Tuxedo

#### Comparisons of varieties across regions are not valid.

- UK = recommended for the UK
- E = recommended for the East region
- W = recommended for the West region
- N = recommended for the North region
- E&W = recommended for the East and West regions
- LSD = Least significant difference
- P1 = first year of recommendation
- P2 = second year of recommendation
- **= variety no longer in trials

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## YIELD, AGRONOMY AND DISEASE RESISTANCE

### HGCA Recommended List® Winter wheat 2015/16

<table>
<thead>
<tr>
<th>End-use group</th>
<th>Soft Group 1</th>
<th>Soft Group 2</th>
<th>Soft Group 3</th>
<th>Soft Group 4</th>
<th>End-use group</th>
<th>Soft Group 1</th>
<th>Soft Group 2</th>
<th>Soft Group 3</th>
<th>Soft Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>United Kingdom (10.0 t/ha)</td>
<td>102</td>
<td>102</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>East region (10.0 t/ha)</td>
<td>101</td>
<td>102</td>
<td>99</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>West region (9.9 t/ha)</td>
<td>103</td>
<td>100</td>
<td>99</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>North region (9.9 t/ha)</td>
<td>104</td>
<td>100</td>
<td>99</td>
<td>96</td>
</tr>
</tbody>
</table>

### Fungicide-treated grain yield (% treated control)

<table>
<thead>
<tr>
<th>Region</th>
<th>United Kingdom (10.0 t/ha)</th>
<th>East region (10.0 t/ha)</th>
<th>West region (9.9 t/ha)</th>
<th>North region (9.9 t/ha)</th>
</tr>
</thead>
</table>
| Untreated grain yield (% treated control)

### Agronomic features

- **Resistance to lodging without PGR**
- **Resistance to lodging with PGR**
- **Height without PGR (cm)**
- **Height without PGR (cm)**
- **Ripening (days +/- Solstice, -ve = earlier)**
- **Resistance to sprouting**

### Disease resistance

- **Mildew**
- **Yellow rust**
- **Brown rust**
- **Septoria nodorum**
- **Septoria tritici**
- **Eyespot**
- **Fusarium ear blight**

### On the 1-9 scales, high figures indicate that a variety shows the character to a high degree (e.g. high resistance)

- **UK** = recommended for the UK
- **C** = yield control (for current table)
- **E** = recommended for the East region
- **E&W** = recommended for the East and West regions
- **N** = recommended for the North region
- **Sp** = KWS Cashel is a specific recommendation for end-use as a corrective wheat with high gluten strength.

Comparisons of varieties across regions are not valid.

R = believed to be resistant to orange wheat blossom midge (OWBM) but this has not been verified in RL tests

@ Skyfall, Revelation and Grafton are believed to carry the Pht1R resistance gene to eyespot but this has not been verified in RL tests

LSD = Least significant difference

Average LSD (5%) varieties that are more than one LSD apart are significantly different at the 5% confidence level.

® = "HGCA RECOMMENDED LIST" is a registered trademark of the Agriculture and Horticulture Development Board
### HGCA Recommended List® Winter wheat 2015/16

#### SUPPLEMENTARY DATA

<table>
<thead>
<tr>
<th>End-use group</th>
<th>Hard Group 1</th>
<th>Hard Group 2</th>
<th>Hard Group 3</th>
<th>Soft Group 4</th>
<th>Hard Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
</tr>
<tr>
<td>Scope of recommendation</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
<td>UK</td>
</tr>
<tr>
<td>Breeder/ UK contact</td>
<td>UK contac</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Breeder</th>
<th>UK contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAGT</td>
<td>KWS</td>
</tr>
<tr>
<td>KWS</td>
<td>Sen</td>
</tr>
<tr>
<td>BA</td>
<td>KWS</td>
</tr>
<tr>
<td>WGS</td>
<td>KWS</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual treated yield (% control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 (9.9 t/ha)</td>
</tr>
<tr>
<td>2011 (10.1 t/ha)</td>
</tr>
<tr>
<td>2012 (9.9 t/ha)</td>
</tr>
<tr>
<td>2014 (11.4 t/ha)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sowing date (most trials were sown during October)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early sown (before 15th Sept) (10.4 t/ha)</td>
</tr>
<tr>
<td>First cereal (10.4 t/ha)</td>
</tr>
<tr>
<td>Heavy sown (10.4 t/ha)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lodging % with PGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>End##</td>
</tr>
<tr>
<td>Early Sept sown</td>
</tr>
<tr>
<td>Early Oct sown</td>
</tr>
<tr>
<td>Early Nov sown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Latest safe sowing date #</th>
</tr>
</thead>
<tbody>
<tr>
<td>End##</td>
</tr>
<tr>
<td>Early Sept sown</td>
</tr>
<tr>
<td>Early Oct sown</td>
</tr>
<tr>
<td>Early Nov sown</td>
</tr>
</tbody>
</table>

All yields on this table are taken from treated trials receiving a full fungicide and PGR programme.

UK = recommended for the UK
C = yield control (for current table)
E = variety no longer in trials
N = recommended for the North region
# = latest safe sowing date is the advised latest safe sowing time to give a sufficient cold period for flowering.

Key to Breeder and UK contact codes:

- **Agr** = Agrii (www.agrii.co.uk)
- **Bre** = Saatzucht Josef Breun, Germany
- **RAGT** = RAGT Seeds, UK (www.ragt.co.uk)
- **Lim** = Limagrain UK (www.limagrain.co.uk)
- **Mom** = Momont, France
- **Sen** = Syngenta (www.syngenta.co.uk)
- **RATG** = Ratag Seeds, UK (www.ratag.co.uk)
- **Sal** = Salatch, France
- **Senova** = (www.senova.co.uk)
- **Sec** = Secobra, France
- **SyP** = Syngenta Participations AG (www.syngenta.co.uk)

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