WHEAT

Wheat is the most widely grown arable crop in the UK. On average, it covers around 2 million hectares of land and produces about 15 million tonnes of wheat each year with over 2.5 million tonnes exported to countries mostly in the EU. Wheat is a versatile crop and is used mainly for milling into flour for bread and biscuits, and for animal feed.

The UK has two classifications of wheat for exports; ukp (bread wheat) and uks (soft wheat). ukp and uks exist to create strong, consistent and recognisable classifications to help you easily identify UK milling wheat.
ukp comprises of semi-hard wheat varieties which are suitable to both EU and non-EU bread making. Overseas importers like the consistency and versatility of ukp and it is suitable for many products and can be used to blend with other wheat.

The table below highlights ukp wheat specifications:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific weight (kg/hl)</td>
<td>77.6</td>
<td>77.9</td>
<td>80.9</td>
<td>70.9</td>
<td>77.9</td>
</tr>
<tr>
<td>Hagberg Falling Number (s)</td>
<td>295</td>
<td>307</td>
<td>318</td>
<td>257</td>
<td>341</td>
</tr>
<tr>
<td>Protein (%)</td>
<td>12.4</td>
<td>12.6</td>
<td>12.5</td>
<td>13.2</td>
<td>12.8</td>
</tr>
<tr>
<td>W</td>
<td>207</td>
<td>217</td>
<td>199</td>
<td>201</td>
<td>220</td>
</tr>
<tr>
<td>P/L</td>
<td>0.57</td>
<td>0.50</td>
<td>0.70</td>
<td>0.86</td>
<td>0.62</td>
</tr>
<tr>
<td>Wet Gluten</td>
<td>23.5</td>
<td>24.5</td>
<td>28.2</td>
<td>23.0</td>
<td>23.3</td>
</tr>
</tbody>
</table>

5 year harvest quality data
uks is soft milling wheat suitable for biscuit making, as it has low protein, high extensibility and low water absorption. The low protein level makes it easy to use across a range of biscuit making recipes, including wafers.

The table below highlights uks wheat specifications:

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific weight (kg/hl)</td>
<td>76.0</td>
<td>76.0</td>
<td>79.7</td>
<td>69.2</td>
<td>76.2</td>
</tr>
<tr>
<td>Hagberg Falling Number (s)</td>
<td>217</td>
<td>224</td>
<td>268</td>
<td>222</td>
<td>279</td>
</tr>
<tr>
<td>Protein (%)</td>
<td>10.7</td>
<td>11.0</td>
<td>11.6</td>
<td>12.2</td>
<td>11.5</td>
</tr>
<tr>
<td>W</td>
<td>78</td>
<td>78</td>
<td>92</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td>P/L (%)</td>
<td>0.28</td>
<td>0.20</td>
<td>0.40</td>
<td>0.49</td>
<td>0.22</td>
</tr>
<tr>
<td>Wet Gluten</td>
<td>21.3</td>
<td>22.1</td>
<td>29.8</td>
<td>22.0</td>
<td>21.5</td>
</tr>
</tbody>
</table>

5 year harvest quality data
FEED WHEAT

Wheat produced in the UK which does not meet the high specification required for domestic or overseas milling is generally classed as ‘feed wheat.’ Feed wheat is used in a range of animal feed rations for all classes of livestock.

Benefits of feed wheat in animal feed rations:

- Provides a source of energy due to its high starch content and makes a good substitute for corn in the ration
- Has a higher protein content than corn, reducing the need for protein supplementation in the ration
- Suits a variety of processes - can be fed whole, ground, rolled, flaked or pelleted
- Reduces the need for a pellet binder due to higher gluten content.

Cereal Quality Survey Results – hard endosperm, non-milling wheats

<table>
<thead>
<tr>
<th>GB Feed Wheat</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Average 2010-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific weight kg/hl</td>
<td>76.0</td>
<td>77.7</td>
<td>69.0</td>
<td>76.1</td>
<td>74.7</td>
</tr>
<tr>
<td>Hagberg Falling Number (s)</td>
<td>223</td>
<td>230</td>
<td>221</td>
<td>228</td>
<td>225.5</td>
</tr>
<tr>
<td>Protein (%)</td>
<td>11.0</td>
<td>11.1</td>
<td>11.4</td>
<td>11.4</td>
<td>11.3</td>
</tr>
</tbody>
</table>

UK feed wheat is generally sold as minimum 72.5kg/hl and maximum 15% moisture.
UK barley is grown for human consumption, malting, brewing or distilling and for animal feed. It is an important crop in the rotation system on many farms. In the UK, the production of barley in 2013/14 reached 7Mt with over 1.1Mt going for exports.

It is the second most widely grown crop in the UK; and is currently exported to 26 countries.

4 year harvest quality data

<table>
<thead>
<tr>
<th>GB Barley</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Average 2010-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific weight (kg/hl)</td>
<td>67.0</td>
<td>64.4</td>
<td>62.9</td>
<td>67.5</td>
<td>65.5</td>
</tr>
<tr>
<td>Nitrogen content (%)</td>
<td>1.64</td>
<td>1.71</td>
<td>1.60</td>
<td>1.68</td>
<td>1.66</td>
</tr>
<tr>
<td>Grain through 2.25mm sieve (%)</td>
<td>1.9</td>
<td>1.4</td>
<td>3.6</td>
<td>1.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Grain retained by 2.5mm sieve (%)</td>
<td>94.1</td>
<td>95.8</td>
<td>89.8</td>
<td>94.4</td>
<td>93.5</td>
</tr>
</tbody>
</table>
UK malting barley is grown for malt distilled from grain to make a range of products from breakfast cereals to high quality alcoholic drinks such as beer and whiskey.

Malt is gaining popularity in the food industry as a flavouring component and a source of nutrients. The UK regularly exports malting barley to key buyers including major beer producers such as Germany and the Netherlands.

Good quality malting barley depends on nitrogen content and its ability to germinate; both attributes are found in UK malting barley, which has undergone rigorous testing by the industry.
Barley is a major cereal component in animal feed rations (including fish) and is well recognised as an excellent energy source for ruminants, providing high levels of starch. Being a hard grain it cannot be fed whole, however, it suits a range of processing techniques such as rolling and flaking.

In the United States, barley is a valuable grain for finishing beef diets, whereas in Europe it is widely used in pig and poultry diets. Its starch content is slightly lower than wheat and corn but its protein content is similar to wheat and higher than corn making it a useful substitute for corn.

The UK regularly exports feed barley to key buyers such as Saudi Arabia and other Middle East and North African countries.
On average, 700,000 tonnes of oats are produced every year for human and animal consumption. Oats are used in breakfast cereals, beauty products and animal feed. Over 35,000 tonnes has been exported from the 2013/2014 season, mostly to the EU.

Oats are widely grown in regions with cooler temperatures, primarily for the human food breakfast market but it is still a valuable energy source for farm livestock and horses.
Over recent years, oilseed rape production in the UK has taken on a greater prominence, with increases in both area and total production. Last year, 720,000 tonnes was exported to seven counties in the EU.

The seed is crushed to extract oil, which is used in the food and animal feed industries, with the residue being used as a high protein animal feed ingredient. There has also been a strong demand for rapeseed oil for use in biodiesel production in Europe.
OTHER PRODUCTS

The UK also produces smaller quantities of other cereals and oilseeds:

- Triticale
- Linseed
- Rye

As well as processed and co-products:

- Malt
- Co-products of ethanol production
- Co-products of the milling process
QUALITY ASSURANCE JOURNEY

These quality assurance and traceability processes and measures have been put in place by industry and government to ensure UK cereals are of the highest possible quality and safety.

Seed Certification
- Seed Certification Schemes exist to protect farmers and their customers by ensuring that the seed they buy meets certain quality standards
- In the United Kingdom, certification of seed is governed by two Seed Regulations: The Plant Varieties and Seeds Act 1964 and the Seed Marketing Regulations 2011.

Red Tractor Farm Assurance
- RTFA (Red Tractor Farm Assurance) Combinable Crops Scheme operates in England and Wales with over 15,000 members
- Assurance standards are set at or above the minimum legal requirements to ensure the producers are adhering to relevant legal requirements, including compliance with the Food Safety Act
- The scheme ensures traceability in all aspects of grain production, from pesticide and chemical use, to effective grain storage and risk assessments, including mycotoxin risk assessments.
The Trade Assurance Scheme for Combinable Crops (TASCC) covers all activity from the farm gate to the ship, with over 95% market coverage. It provides credible independent verification that the supply chain is meeting its legal obligations under food legislation and associated codes of good practice, of which there are four:

1. The TASCC Haulage Code, including vehicle hygiene, control of cross-contamination from previous loads and correct use of chemicals.

2. The TASCC Merchant Code, including the exporting of combinable crops covered by the International Trading and Shipping Module.

3. The TASCC Testing Code, establishing common standards of testing to increase confidence in the accuracy of test results.

4. The TASCC Storage Code, comprising a set of minimum standards to ensure food safety during the handling and storage of combinable crops.
To find out more information on cereals and oilseeds from the UK, please refer to our Exporters Directory which gives you the direct contact information of all UK cereal and oilseed exporters and lists all the products they supply.

You can find a web version at: www.hgca.com/exportersdirectory or get in touch with BCE, if you would like a printed version.

If you wish to make an enquiry, feel free to use this information and contact the exporters directly. Please get in touch with BCE if you require a translator during any correspondence.
ABOUT BCE

BCE (British Cereal Exports) facilitates exports of UK cereals as whole grain. Its activities are guided by a committee of growers and traders. BCE provides a link between overseas customers and the cereals sector, supplying independent information on the UK cereal industry.

We visit customers in their own markets to understand their needs and also hold a variety of events to allow end users to see the UK cereals industry first-hand, such as our bread and biscuit making workshops.

BCE has contacts throughout the industry, from plant breeders to UK traders and can put you in touch with the right people for your enquiry. We can help you make appointments and suggest itineraries for your trip to the UK.

For further information on BCE, visit www.hgca.com/bce

Contact us:

To find out more information about the cereals and oilseeds the UK has to offer, please contact us using the information below.

BCE
AHDB-HGCA
Stoneleigh Park
Kenilworth
Warwickshire
CV8 2TL
UK

Contact:

Dorit Cohen
Senior Events and Marketing Executive
Tel: +44 (0)24 7647 8740
Email: dorit.cohen@hgca.ahdb.org.uk

Sarah Mann
Exports Manager
Tel: +44 (0)24 7647 8739
Email: sarah.mann@hgca.ahdb.org.uk
HGCA is a division of the Agriculture and Horticulture Development Board. © September 2014 Agriculture and Horticulture Development Board. The ukp and uks classifications are registered trademarks of AHDB.