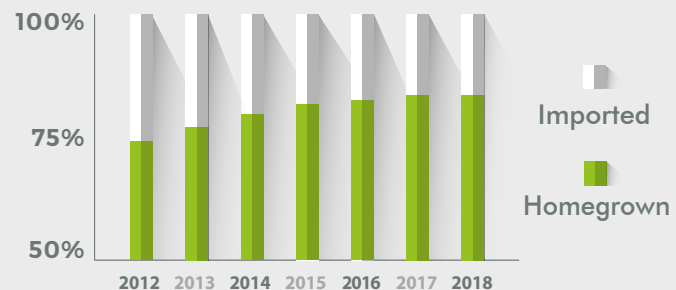


5 million tonnes of wheat

That is what UK flour mills process each year, 85% of which is homegrown. The popularity of milling varieties and the quality of recent harvests has led to an increase in domestic usage by flour millers, now at one of its highest recorded levels. The UK milling industry is a well-established market, not dependent on political whim. Whilst Brexit does bring uncertainty, the nation's demand for flour-based foods will continue regardless and UK millers will continue to require large quantities of domestic wheat.

RISING MILLER DEMAND FOR UK WHEAT



The milling industry tests on average 67 wheat candidate varieties each year

Testing new varieties

The milling industry tests wheat varieties over the three-year application process to join the Recommended List (RL). Wheat, flour and baking tests across three seasons provide millers with a good understanding of variety quality and whether the flour will meet customer specifications. The assessments ensure that new RL varieties continue to meet the quality requirements of millers.



Varietal choice and preference

It is important that UK farmers grow a range of varieties across the **nabim** Groups. Varieties in each Group possess specific quality characteristics that are needed for the diverse flours produced by the milling industry. As such, millers prefer some to others and offer premiums accordingly. Knowing both the requirements and preferences of your local mills is key to maximising incomes from milling wheat. The **nabim** Mill Map (nabim.org.uk/mill-map) will help you identify your nearest mill.



Achieving quality

For all milling varieties, regardless of Group, Hagberg Falling Number, specific weight and protein are key quality characteristics with a significant impact on the final flour quality. As the yields of milling varieties have increased in line with feed varieties, careful attention must be paid to crop nitrogen requirements.

The milling industry welcomes the AHDB project to update nitrogen and sulphur fertiliser recommendations for milling wheat. Alongside nitrogen, sulphur is another key nutrient for protein quality and plays a role in reducing asparagine in cereals. Asparagine is the precursor for acrylamide, a possible carcinogen and levels in grain must be kept as low as possible.

- The **nabim** Wheat Guide provides the UK flour milling industry's views on wheat varieties and their relative values in the UK market. It complements other information provided in the 'AHDB Recommended Lists 2019/20 for cereals and oilseeds'.
- Seasonal variations in climate and growing conditions mean that not only will varieties vary in their agronomic performance, but this will also be reflected in their 'end-use' performance.
- The reliability and safety of milling wheat is of paramount importance. Millers only purchase wheat varieties in this guide that have been grown to assured standards such as those within the Red Tractor Combinable Crops Assurance Scheme or the Scottish Quality Crops Scheme.
- Harvested wheat should be properly stored using a HACCP approach (see the AHDB Grain storage guide for cereals & oilseeds – third edition). Different varieties should be separated within stores in order to maintain their full value. Even where varieties are of apparently similar value, mixing can reduce their marketability: a factor brought out in the comments below.
- Whilst a number of factors influence varietal choice, the preference of local millers should always be a consideration.

Varieties are listed in alphabetical order within each of the **nabim** Groups.

nabim Group 1

- These are the varieties that produce consistent milling and baking performance.
- Providing they achieve the specified quality requirements including 13% protein, 250s Hagberg Falling Number (HFN) and a specific weight of 76kg/hl, millers will offer a premium above base prices.
- Lower protein Group 1 wheat may also be of value, but will attract a lower premium.
- Group 1 varieties are not interchangeable and some are better suited to specific uses than others. Therefore, it is important to understand the end-use requirements of your customer.

CRUSOE Crusoe has consistently demonstrated good protein content and quality. The bread crumb structure is notably white and of good quality. Large volumes of this variety continue to be seen and its baking performance remains good, consequently it remains popular with millers.

KWS TRINITY This variety exhibits good gluten quality even at lower protein levels and has shown good baking performance. Relatively small quantities of this variety have been seen by millers.

RGT ILLUSTRIOUS This variety has a higher level of water absorption (a good feature) and demonstrates good breadmaking potential, even at lower protein levels.

SKYFALL This variety is very popular with millers because it shows good milling and baking qualities. Because it is high yielding, nitrogen applications may have to be adjusted to achieve protein specifications.

KWS ZYATT This variety shows good gluten strength and milling quality alongside a good baking performance. As a high yielding variety, nitrogen applications may have to be adjusted to achieve protein specifications.

Spring wheat

MULIKA

This variety has good rheological and baking qualities and is the spring variety of choice for most millers.

nabim Group 2

- Grown mainly as feed wheats, some may be used by millers in 'general purpose' grists if they achieve contractual standards, but are unlikely to attract a premium.
- Some are consistent, but not as good as those in Group 1; some perform inconsistently while others are suited to specialist flours. Therefore, these varieties are likely to attract varying market prices.
- Lower protein Group 2 wheats are also widely used by millers, but will attract variable premiums.

CORDIALE This variety was removed from the 2019 Recommended List, however, it continues to be popular with millers owing to its good protein, HFNs and specific weights and its consistent milling and baking performance.

KWS EXTASE (NEW) Over three years of testing, this variety showed protein levels similar to KWS Siskin and its performance was consistent with that of other Group 2 varieties. It showed some variability in its baking performance

KWS LILI This variety has lower protein levels than the other Group 2 varieties. There are some concerns with the bread crumb structure of loaves made solely with this variety but it will usually be used in grists.

KWS SISKIN This variety has protein levels and specific weights that are slightly higher than those of KWS Lili. Some yellowness may be seen in the flour colour. It has shown a degree of variability in its baking performance so may be more suited to use in blends.

LG DETROIT (NEW) Over three years of testing, this variety showed protein levels similar to the Group 1 varieties. Gluten quality and baking performance showed some variability.

Spring wheats

KWS CHILHAM This variety has shown lower protein levels than Mulika, but with a stronger gluten quality. The baking quality would not necessarily suit all end users.

KWS COCHISE This variety has shown good protein levels and specific weights, although there was a degree of variability in performance.

KWS WILLOW This variety has a tendency to produce low Hagberg Falling Numbers and, overall, it has shown some variability especially with baking performance. As a result, it is more likely to be suited to uses in blends.

nabim Group 3

- This Group contains soft varieties for biscuit, cake and other flours where the main requirement is for soft milling characteristics, low protein, good extraction rates, and extensible but not elastic gluten.
- The Group 3 wheat area is at one of its lowest levels, despite consistently strong demand by UK millers.

KWS BARREL This variety fully meets the Group 3 criteria.

KWS BASSET Although this variety has shown some variation in dough extensibility, it fully meets the criteria for a Group 3 variety.

ELICIT This variety has shown slightly lower Hagberg Falling Number and slightly weaker gluten than other Group 3 varieties, but meets the criteria for the group.

KWS FIREFLY (NEW) Over the three years of testing, this variety showed similar quality to the Group 3 control and fully met the Group criteria.

ZULU This variety has consistently met the requirements of a Group 3 wheat.

nabim Group 4

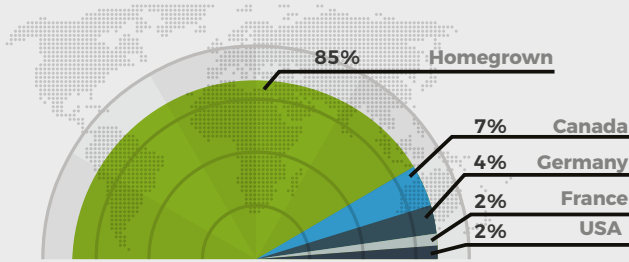
- These varieties are grown mainly as feed wheats. However, some may be used by millers in certain 'general purpose' grists if they achieve the contractual standards but are unlikely to attract a premium.
- Growers should avoid mixing hard and soft varieties.

HARD KWS Alderon (spring), Costello, KWS Crispin, Dunston, Evolution, Gleam, Graham, RGT Gravity, Hexham (spring), JB Diego, KWS Kerrin, KWS Kilburn (spring), Shabras, KWS Talisker (spring).

The four spring varieties generally have higher protein contents.

SOFT Bennington, Elation, KWS Jackal, Leeds, LG Motown, Myriad, Revelation, LG Skyscraper, LG Spotlight, LG Sundance and Viscount.

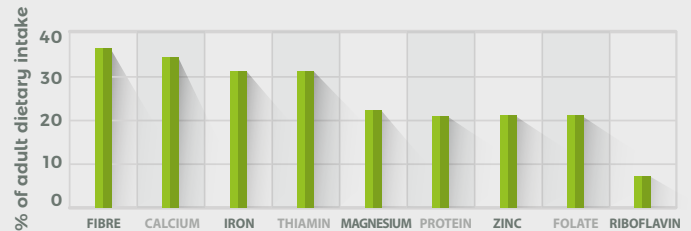
SUPPORTING BRITAIN'S FARMERS



85% of wheat milled in
THE UK WAS HOMEGROWN

SUSTAINING BRITAIN'S HEALTH

**FLOUR IS A VITAL SOURCE OF MANY
VITAMINS AND MINERALS** And low in
fat and sugars



FINDING YOUR MARKET



- 52 mills located across the UK
- Use the **nabim** mill map to find those near you
- nabim.org.uk/mill-map

UNDERSTANDING REQUIREMENTS

- Specifications and varietal preferences vary from mill to mill
- Food safety is of paramount importance to all millers
- Wheat sold to mills is placed on the market for human consumption and must be food safe



FEEDING THE NATION

- Over 4,000,000 tonnes of UK wheat purchased by millers each year
- UK flour provides one fifth of the nation's energy and protein
- Bread is the most popular item bought in Britain, with 99.8% of households purchasing it

