

Agrovista  
exclusive



# Treble 4

## winter wheat

### A NEW hard milling UK-bred feed wheat by independent cereal breeder F1 Seeds

Whilst the AHDB Recommended List is the first port of call for many growers there is growing evidence that the 'one cap fits all' philosophy is flawed when individual grower's needs are considered. As an independent wheat breeder, F1 Seed Ltd has engaged with many growers and the overwhelming view received is that growers need more information about variety choice.

Treble 4 was added to the UK National List in November 2024 and production for seed initiated on a small trialing scale harvest 2025.

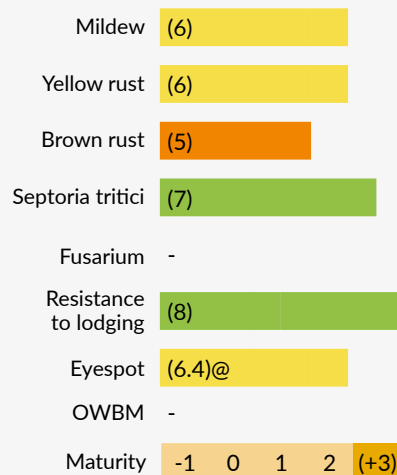
Those small number of commercial crops are currently under evaluation with Agrovista agronomists across the UK. Bulk seed production began autumn 2025 with one of the best seed growers in the southwest, being monitored by Peter Waltham, Agrovista agronomist:

"The crop looks to be established exceptionally well with good plant and tiller numbers. All very uniform. Canopy development looks about right (not too vigorous and not too slow), with good light penetration" reported Peter on 9 March.

## Treble 4 (VL data)

Group 4 Hard

- A high yielding hard feed winter wheat with a robust disease resistance profile and stiff straw
- Treble 4 has a similar growth habit to KWS Palladium suggesting a mainstream drilling window as well as good second wheat opportunity through genetically strong VPM eyespot resistance
- Septoria resistance is also good favouring growers in the wetter regions of the UK
- Grain quality is above average for a feed type with good specific weight, high hagerb and above average protein
- In official trials Treble 4 was notably stiffer than control varieties Barrel and Skyfall



REGION	YIELD
UK	(105)
EAST	(106)
WEST	(103)
NORTH	(98)
Untreated yield	(83)
First cereal	-
Second cereal	-
Light soils	-
Heavy soils	-
Spec. weight	(78.4)

## Treble 4 summary - treated yield

	2021 Treated	2022 Treated	2023 Treated	2024 Treated	2025 Treated	2021-2025
Trial number	1	3	5	2	3	14
LG SKYSCRAPER	97	99	102	94	98	98
SKYFALL	93	96	96	93	96	95
KWS EXTASE	102	103	103	97	99	101
CHAMPION			102	112	99	104
<b>TREBLE 4</b>	<b>110</b>	<b>102</b>	<b>108</b>	<b>101</b>	<b>109</b>	<b>106</b>

SOURCE: F1 Seed

## Variety Pedigree

The first information a grower should look at is the variety pedigree. This is valuable in assigning risk and what traits the variety may or may not have.

### Treble 4 = KWS Kerrin x Freiston

These parent varieties were selected because of their high yield potential but also the diverse nature of the genetics deployed, KWS Kerrin was derived from the cross KWS Santiago x (Istabraq x Wizard). Freiston was selected from the cross (Alchemy x Hereford ) x Shepherd.

## Disease profile

In 2025 yellow rust became a major topic of conversation as the resistance gene YR15 was overcome. The new race evolved in 2024 but became more widespread in 2025. 2026 has seen significant progression.

Treble 4 has always picked up some yellow rust and 2025 was no exception.

However, the disease has not reached the levels seen in varieties such as Champion and KWS Aintree and it does not possess YR15.

Though yellow rust is a major disease the reality is that *Septoria tritici* is a more challenging disease. The maritime climate of the UK is particularly favourable for the development of *Septoria tritici* which is present in every field in the UK. Treble 4 has shown a high level of resistance in trials with an AHDB rating of 7.



*The crop looks to be established exceptionally well with good plant and tiller numbers. All very uniform. Canopy development looks about right (not too vigorous and not too slow), with good light penetration*

**Peter Waltham**  
Agrovista agronomist



Of the other foliar diseases mildew comes in with a rating of 5 along with a brown rust also with a rating of 5.

Many varieties are now susceptible to eyespot particularly those with KWS Extase in their parentage. This disease is expressed not just in second wheats but also in first wheats when drilled early – ‘pseudo second wheats’. Treble 4 carries the ‘Rendezvous resistance’ derived from *Aegilops ventricosa* which explains its high rating of 6.4. This resistance has been robust since its introduction in the late 1970s.

## Agronomic traits

Treble 4 has very stiff straw – in untreated trials (the best format for evaluating straw strength) – over a 2-year period the lodging score was 1.6%. This compares with Skyfall 3.5%, Gleam 4.7% and LG Skyscraper at 9.1%. In treated trials the scores were 1.5% for Treble 4, 2.0% for Gleam and 4.0 for Skyscraper. As with most varieties Treble 4 will respond well to Plant Growth Regulators (PGRs) but these should be considered as ‘insurance treatments’.

In F1 Seed Ltd private trials Treble 4 recorded 3% lodging in treated trials compared to LG Skyscraper (20%), Gleam (20%) and 5% for KWS Extase

With such stiff straw growers have the option to consider increasing nitrogen rates to maximise output.

## Grain quality

Good physical grain quality remains high on our priority of essential wheat characteristics. Treble 4 has produced consistently high specific weights (Treble 4 = 78.2, Champion = 75.5, LG Skyscraper = 77.1)\* and high Hagberg falling numbers too (Treble 4 = 284, Champion = 249, LG Skyscraper = 212) \*

Hard milling wheat with high Hagberg can often command premiums in the market as end users look towards blending options for human consumption.

\*Source: AHDB

## Place in the rotation

Wheat varieties tend to fall into three distinct development groups giving an insight into where and when the varieties should be drilled. These groups are

### 1. Fast developing/erect growth habit

These varieties show very pronounced erect habit in the spring and should not be drilled early.

### 2. Medium developing/semi erect habit

These varieties (which represent the main variety types) are suited to end September onwards drilling.

### 3. Very prostrate late developing

These varieties are suited to early drilling.

Treble 4 fits into the Medium developing profile and as such is well suited for the drilling window 20 September onwards. With its stiff straw and good septoria and eyespot ratings, Treble 4 **should** be suited to earlier drilling but as yet there is insufficient data to support this key rotational position.

Agrovista assessments of speed of growth across a range of varieties using NDVI\*\*, placed Treble 4 this season to be initially, in the autumn, slower than LG Typhoon and KWS Dawsum, but as we moved through winter and into spring it has quickened to now be ahead of all slow-developing varieties. Early indications are promising that Treble 4 is a potential candidate for mid-September drilling.

\*\*Normalised Difference Vegetation Index. A visual measurement of green leaf area which can then be compared across varieties in trial to determine differences in growth rate.

## Winter wheat variety trial Dennington Drilled 26/9/25

Normalised Difference Vegetation Index								
Variety	05/11/2025		26/01/2026		11/03/2026		26/03/2026	
BAMFORD	0.492	abc	0.679	c-f	0.757	b-e	0.800	d-g
KWS DAWSUM	0.494	abc	0.682	cde	0.753	b-e	0.803	d-g
LG TYPHOON	0.489	abc	0.630	i	0.714	fg	0.774	i
MINDFUL	0.494	abc	0.686	cde	0.736	ef	0.792	e-i
RGT GUARDSMAN	0.487	abc	0.660	gh	0.736	ef	0.778	hi
<b>TREBLE 4</b>	<b>0.484</b>	<b>abc</b>	<b>0.653</b>	<b>h</b>	<b>0.759</b>	<b>b-e</b>	<b>0.807</b>	<b>c-g</b>

SOURCE: AgX Dennington winter wheat variety trials harvest 2026

### Yield potential

The first attribute that growers look for is potential yield. AHDB trials input protocols reflect a very robust fungicide regime with more than £350 per hectare spend. Whilst this may reflect the true maximum yield potential of a variety, many growers do not operate with this level of fungicide cost. It is therefore important to monitor the untreated yields as well, for the yield difference indicates the level of risk.

#### Treble 4 summary - untreated yield

	2022 Untreated	2023 Untreated	2024 Untreated	2025 Untreated	Trial mean
Trial number	1	1	1	1	4
LG SKYSCRAPER	113	105	97	93	102
SKYFALL	61	95	43	85	71
KWS EXTASE	118	99	124	n/a*	114
CHAMPION		107	114	96	106
<b>TREBLE 4</b>	<b>121</b>	<b>119</b>	<b>104</b>	<b>100</b>	<b>111</b>

SOURCE: F1 Seed \*n/a = destroyed by deer



*The seed crop continues to look very even and picking up vigour...rooting has appeared to increase more too*

**Peter Waltham**

**Agrovista agronomist  
reported 9 April**