

Continued from inside:

Both loaf volume and crumb structure in baking tests have been consistently good, similar to Hereward.

In common with all other high yielding varieties, Xi19 has tended to produce a lower than average protein content in official trials (which are not usually managed to produce milling samples) because of dilution of protein by starch. Protein content can be improved by husbandry, particularly nitrogen application, and independent trials have established that it is possible to achieve high yield and 13% protein with Xi19 at nitrogen levels in line with current practice for managing high yielding milling wheat.

SUITABLE FOR LATE SOWING

Xi19 is ideally suited for sowing after late lifted root crops- such as potatoes and sugar beet - and has performed well in this situation.

	RL trials	Late sown RL trials
UK Yield % Treated Controls (t/ha)	103 (10.3)	109 (9.81)
Resistance to Lodging with PGR	8	7
Straw Height	82	98
Protein Content	12.1	11.7

In late autumn sown trials Xi19 maintained its high yield potential and had better standing power, shorter straw and a higher protein content in comparison with the trials sown earlier.

The latest safe sowing date for Xi19 is the end of February, one month later than Malacca and Hereward.



Xi19
WINTER WHEAT



TECHNICAL AND MARKETING GUIDE

- Highest yielding NABIM Group 1 bread-making variety
- Very good overall disease resistance, especially to Mildew, Yellow and Brown Rust
- Responsive to plant growth regulator use, with good standing power in treated trials
- Reliable performer in bread-making tests and liked by millers because of its white flour colour
- Ideally suited for late sowing after sugar beet and potatoes

All data is a partial extraction from the HGCA 2006/7 Recommended List unless otherwise stated. The full Recommended List database can be consulted at www.hgca.com



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SUMMARY

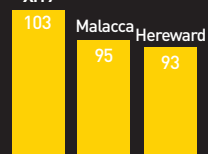
Xi19 is the highest yielding NABIM Group 1 wheat variety on the 2006 HGCA Recommended List, with average yields 8% above Malacca. Xi19's unique combination of high yield and quality give it the potential, when correctly managed, to produce excellent gross margins. In NABIM tests Xi19 has performed consistently well and it is liked by the millers because of its white endosperm colour.

PEDIGREE

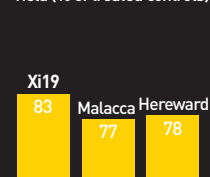
(Cadenza x Rialto) x Cadenza

VERY HIGH YIELD POTENTIAL

TREATED YIELD
Yield (% of treated controls)
Xi19



UNTREATED YIELD
Yield (% of treated controls)



Xi19 has shown an excellent yield potential in trials. It is the highest yielding NABIM Group 1 variety in treated trials, 8% above Malacca and 10% above Hereward. Xi19 also has a good untreated yield, superior to Malacca and Hereward by 6 - 7%.

REGIONAL PERFORMANCE

Xi19 is suited to all the wheat growing areas of the UK producing consistently high yields in the three HGCA regions.

HGCA RL REGION	Xi19	Malacca	Hereward
	Yield (% treated controls)		
Dry (East)	104	95	93
Wet (West)	102	95	93
North	102	97	(90)

Xi19 performed particularly well in the main milling wheat growing area in the East of the UK.

SITE FERTILITY PERFORMANCE

Xi19's relative performance improves in situations where it is able to express its high yield potential.

Site yield potential	6t/ha	8t/ha	10t/ha	12t/ha
	Relative yield %			
Xi19	101	102	103	104
Malacca	96	96	96	96
Hereward	98	94	92	90

Source: NIAB Pocket Guide 2005, based on HGCA data

As the site yield potential increased from 6t/ha to 12t/ha there was a corresponding increase in the relative yield of Xi19 from 101% to 104%, demonstrating the variety's ability to exhibit its high genetic potential under fertile growing conditions.

ROTATIONAL POSITION AND SOIL TYPE

Xi19 has performed well when sown as first or second cereal and tended to produce higher yields on the heavier soil types.

ROTATIONAL POSITION	Xi19	Malacca	Hereward
	Yield (% treated controls)		
First Cereal	104	95	93
Second or more Cereal	103	96	94
SOIL TYPE			
Light Soils	102	96	93
Heavy Soils	104	95	95

GOOD OVERALL DISEASE RESISTANCE

	Xi19	Malacca	Hereward
Mildew	8	7	6
Yellow Rust	9	9	5
Brown Rust	8	7	6
<i>Septoria nodorum</i>	6	7	7
<i>Septoria tritici</i>	5	5	5
Eyespot	4	4	5
<i>Fusarium</i> Ear Blight	5	6	5

Xi19 has very good overall disease resistance particularly for Mildew (8), Yellow rust (9) and Brown rust (8). *Septoria tritici* resistance is similar to Malacca and Hereward

RESPONSIVE TO PLANT GROWTH REGULATORS

Xi19 is a relatively tall variety of medium straw length with large fertile heads giving an impressive crop appearance. Like Rialto, one of its parents, Xi19 is responsive to plant growth regulator (PGR) use and has a similar lodging resistance to Claire when both are treated.

	Xi19	Malacca	Hereward	Claire
Straw Height (cm) untreated	98	87	89	91
Resistance to Lodging (no PGR)	5	7	8	6
Resistance to Lodging (with PGR)	7	8	9	7

Numerous trials have consistently shown the benefit of a sequential pgr programme on Xi19 with chlormequat alone, applied as either a single or split application, reducing height by about 7%. In sequence with an ethephon based material (e.g. Terpal¹) crop height has been some 13% lower than where no pgr was used.

Lodging risk can also be lessened through the use of lower seed rates, later sowing and avoiding early applications of nitrogen, especially where crops are forward or have high tiller numbers.

GRAIN QUALITY ATTRACTIVE TO UK MILLERS

Xi19 is a hard endosperm wheat with a good Hagberg Falling Number and high thousand grain weight.

	Xi19	Malacca	Hereward
NABIM Group	1	1	1
Endosperm Texture	Hard	Hard	Hard
Protein Content (%)	11.7	12.3	13.1
Hagberg Falling Number	278	297	234
Specific Weight (kg/hl)	75.6	75.2	79.1
Thousand Grain Weight (gms)	52.0	45.8	48.7
Resistance to Sprouting	7	6	6

Xi19 is likely to gain a full bread-making premium provided that the miller's specifications for protein, Hagberg and specific weight are met. It has been a reliable performer in NABIM tests over a number of seasons producing a good combination of high flour yield and excellent flour colour when milled.



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