

Highest  
breadmaking yields in  
late-drilled situations



# Ketchum

Winter Wheat

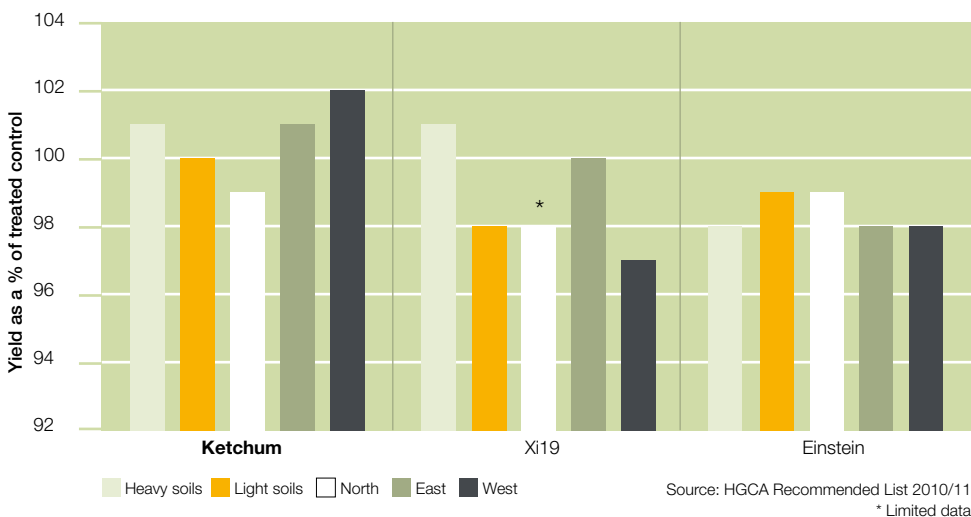
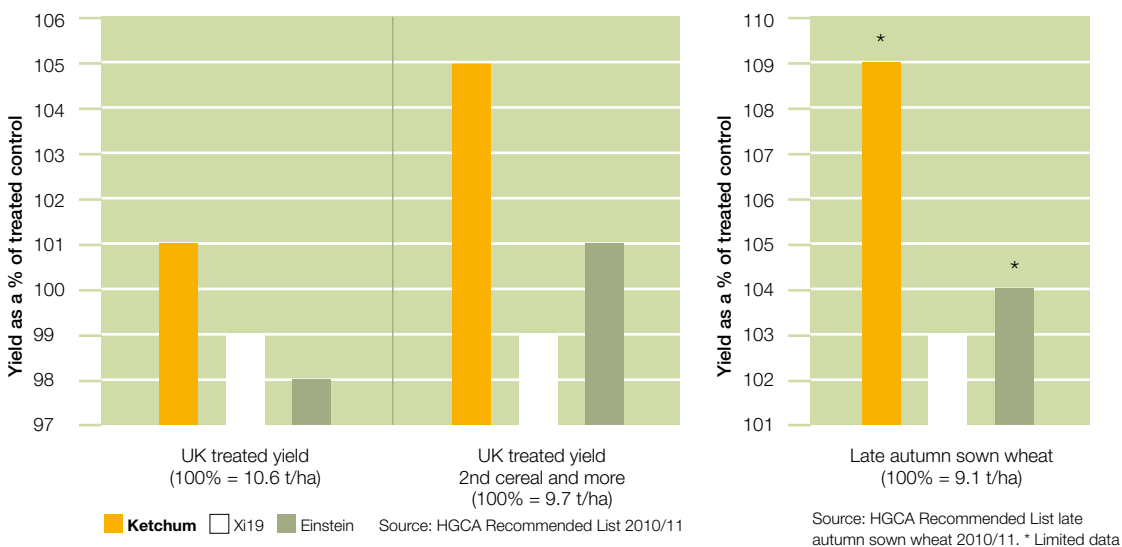
Parentage: Solstice x Xi19  
Status: HGCA Recommended List 2010/11

## High yielding breadmaking winter wheat

### Yield potential

Ketchum is a very high yielding nabim Group 2 winter wheat, with an unbeatable second wheat yield among breadmaking varieties. Ketchum also has the highest yield of all breadmaking varieties in a late-drilled situation (over 0.5 t/ha more than Xi19).

#### High breadmaking variety yields across all HGCA regions and soil types



syngenta  
SEEDS

Syngenta is one of the world's leading companies with more than 25,000 employees in over 90 countries dedicated to our purpose: Bringing plant potential to life.

APRIL 2010

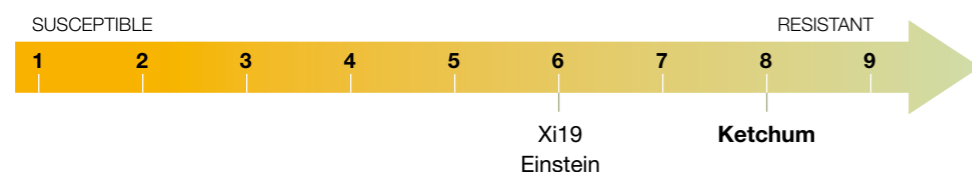
TM

## Disease resistance

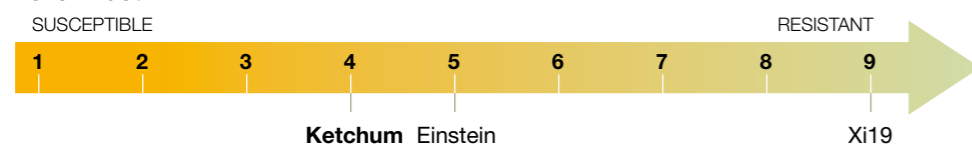
Ketchum has the highest Fusarium ear blight resistance rating of all winter wheat varieties.

### Disease resistance ratings

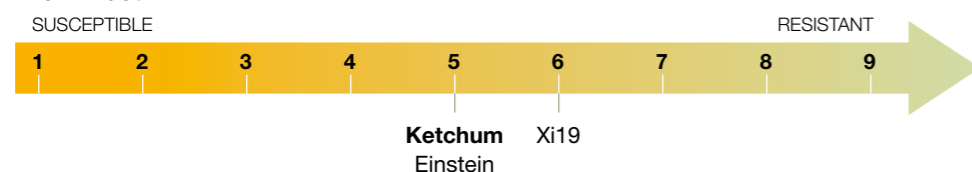
#### Mildew



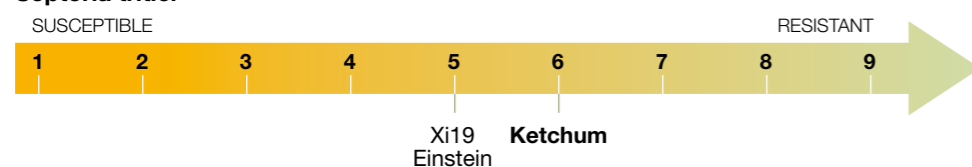
#### Yellow rust



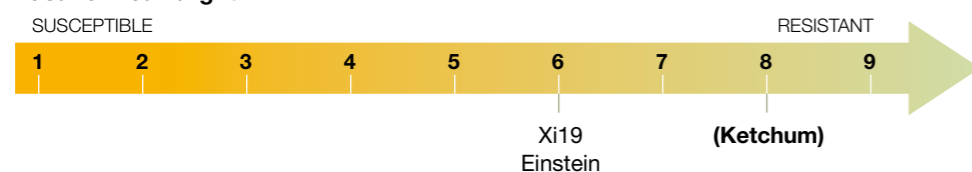
#### Brown rust



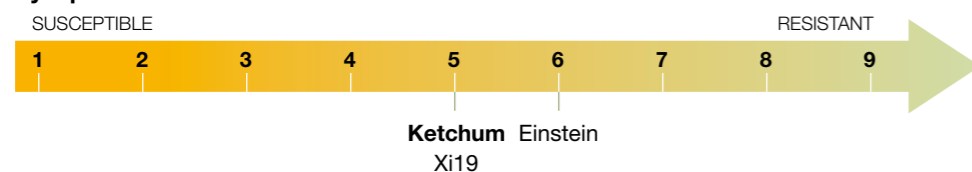
#### Septoria tritici



#### Fusarium ear blight



#### Eyespot



Source: HGCA Recommended List 2010/11  
 ( ) denotes limited data

## Fungicide use

Always consult your agronomist and adapt programmes to local conditions.

### CORE PROGRAMME

With all high yielding varieties, a robust fungicide programme is likely to result in an increase in yield. As with other varieties, with a new race of yellow rust now present, it will be important to factor this into fungicide decisions from the start.

T0 – Cherokee 0.75 lt/ha only if rust risk is high

T1 – Cherokee 1.5 lt/ha + Unix 0.5 kg/ha

T2 – Amistar Opti 1.25 lt/ha + triazole (60% rate)

T3 – Amistar 0.5 lt/ha + triazole (quarter to half rate)

## Agronomic information

Variety	Ripening (+/- Solstice)	Resistance to lodging without PGR	Resistance to lodging with PGR	Straw height (cm) without PGR
Ketchum	0	6	7	95
Xi19	0	4	6	97
Einstein	0	6	7	89

Source: HGCA Recommended List 2010/11

## Growth habit

Ketchum has a semi-erect growth habit and will benefit from the application of a PGR. It has rapid growth through stem elongation and is suitable for drilling from the end of September onwards.

## Recommended sowing rates

Seed rates are dependent on soil conditions, rotation and time of drilling. The more difficult the environment, the higher the seed rate needs to be to compensate for potential plant loss. Suggested seed rates per square metre are shown below, these should always be used in conjunction with TGW.

**Early October:** 220-250 seeds/m<sup>2</sup>

**Mid-October onwards:** 250-275 seeds/m<sup>2</sup>

## Nitrogen application

Ketchum's high yield means that extra nitrogen may be required to ensure that breadmaking specifications are met.

- Total application in the region of 180-240 kg/ha
- To increase the grain protein level, 40-60 kg of the total N should be applied at flag leaf fully emerged (GS39)

These figures are for guidance purposes only. You must work with your agronomist when calculating nitrogen rates and timings, taking into consideration end market requirements and the fertility of the field. You should also work within any Defra guidelines / restrictions.

## PGRs

Ketchum is a tall-strawed variety with a 7 rating for treated resistance to lodging.

- Apply Moddus 0.2 lt/ha + chlormequat 1.25 lt/ha at T1
- Apply an ethephon-based product at T2

## Grain quality

Ketchum is a nabim Group 2 variety and, when grown for quality, meets the specifications required for breadmaking.

Variety	Protein content (%)	Hagberg falling number (seconds)	Specific weight (kg/hl)
<b>Ketchum</b>	<b>11.4</b>	<b>246</b>	<b>77.6</b>
Xi19	11.5	271	76.5
Einstein	12.1	265	77.6

Source: HGCA Recommended List 2010/11

## Storage management

Correct storage of quality wheat is a priority to ensure harvest quality remains. Detailed wheat storage and marketing information can be found in the nabim publication 'Getting it right' and on the nabim website: [www.nabim.org/uk](http://www.nabim.org/uk)

Source: HGCA Recommended List 2010/11 – the full database can be consulted at [www.hgca.com](http://www.hgca.com)  
On the 1-9 scales high figures indicate that a variety shows the character to a high degree (e.g. high resistance).

### Disclaimer

The information given in this document is for general guidance only. Whilst every care has been taken to ensure it is accurate, it is, out of necessity, of a general nature and variation in growing environment or climate can render it inaccurate. Syngenta Seeds Ltd cannot accept any liability arising out of or in connection with the use of this information. Crop protection products should be used in conjunction with manufacturers' recommendations. AMISTAR®, AMISTAR OPTI®, CHEROKEE® and MODDUS® are Registered Trademarks of a Syngenta Group Company. AMISTAR® (MAPP 10443) contains azoxystrobin. AMISTAR OPTI® (MAPP 12515) contains azoxystrobin and chlorothalonil. CHEROKEE® (MAPP 13251) contains cyproconazole, propiconazole and chlorothalonil. MODDUS® (MAPP 08801) contains trinexapac-ethyl. All other brand names used are trademarks of other manufacturers in which proprietary rights may exist. **Always read the label. Use pesticides safely.** Syngenta AG 2010.

Syngenta Crop Protection UK Limited, Syngenta Seeds Ltd, and their affiliates will use this information to provide the services requested by you and to communicate product information, services and offers that we believe are relevant to your business. We use service partners to send these communications on our behalf. WE DO NOT, HOWEVER, PASS INFORMATION TO THIRD PARTIES FOR DIRECT MARKETING PURPOSES. If you do not want to receive these communications from us, write to the database manager at Syngenta.



syngenta  
SEEDS

Syngenta Seeds Limited, CPC4, Capital Park, Fulbourn, Cambridge CB21 5XE  
Tel: +44 (0) 1223 883525 Fax: +44 (0) 1223 882238 Email: [cereal.enquiries@syngenta.com](mailto:cereal.enquiries@syngenta.com)  
Website: [www.newfarmcrops.co.uk](http://www.newfarmcrops.co.uk)  
Registered in England No. 345486