



The tried and trusted spring malting barley with full IBD approval for brewing and distilling

Parentage: Chad x (Corniche x Force)

Status: HGCA Recommended List 2009 and SAC Recommended List 2009

Yield Potential

Optic has consistently produced high yields in trials and on farm over the last twelve years, making it a truly reliable and robust variety, sought after by maltsters, brewers, distillers and exporters.

Variety	UK Treated Yield % (7.1 t/ha)	UK Untreated Yield %
OPTIC	96	79

Source: HGCA Recommended List 2009

Variety	North East % (7.3 t/ha)	North West % (6.4 t/ha)	East - Dry % (7.0 t/ha)	West - Wet % (7.3 t/ha)
OPTIC	96	97	94	96

Source: HGCA Recommended List 2009

Disease Resistance

Optic has moderate resistance to mildew, brown rust and BYDV but has below average Rhynchosporium resistance and a specific treatment will be required. Seedling mildew may affect the crop during a very mild spring, although adult plant resistance is moderate.

Variety	Mildew	Yellow Rust	Brown Rust	Rhynchosporium	BYDV
OPTIC	5	8	6	4	(5)

Source: HGCA Recommended List 2009

Fungicide Use

Always consult your agronomist and adapt programmes to local conditions.

Getting early to mid-season agronomy right is crucial to establishing a healthy crop.

- T0 - The T0 spray prevents diseases gaining a foothold in long growing seasons or where disease pressure is high. The use of Unix helps keep Rhynchosporium at bay.
- T1 - Timing is key for protecting the canopy during the plants' main burst of growth. Kayak + Triazole provides broad spectrum disease control.
- T2 - Managing late season plant health is also vitally important to ensure a healthy harvest. This is the key time to protect grain fill with awns and green leaf areas being the key targets. Strobilurins protect against foliar diseases and Chlorothalonil has demonstrated control of biotic and abiotic spotting.

CORE PROGRAMME

- T0 - Unix and Tern (should be used where mildew disease pressure is high)
- T1 - Kayak + Triazole
- T2 - Amistar Opti + Triazole



Agronomic Information

Optic produces excellent results across all areas of the UK. It has good standing power and reasonable length straw. Its late maturity may influence drilling date in the more northerly regions of the country.

Variety	Resistance to lodging	Straw height (cm)	Ripening v Optic	Resistance to brackling
OPTIC	8	75	0	5

Source: HGCA Recommended List 2009

Growth Habit

Early Spring: Semi prostrate, with medium fast growth

Tillering ability: Medium

Maturity: Late

Drilling Dates

Suitability for early drilling: Moderate to good

Suitability for late drilling (April): Good

Optimum drilling date: January to April

Recommended Sowing Rates

Seed rates are dependent on soil conditions at the time of drilling: the more difficult the environment the higher the seed rate must be to compensate for potential plant loss. The table below shows the suggested number of seeds per square metre that should be planted under good conditions.

	Dec/Jan	February	March	April
ENGLAND	350-375	350-375	350-375	400
SCOTLAND	350-375	350-375	375-400	400

This table should always be used in conjunction with the thousand grain weight of the seed to calculate the sowing rate.

Nitrogen Application

Varieties have different optimum nitrogen rates, therefore balancing N inputs to end market, variety and season is key.

Ensure you have checked levels with your contract and end market

Syngenta Seeds' nitrogen timing trials in Scotland have shown the following effects to changes in N timing and quantity for Optic:

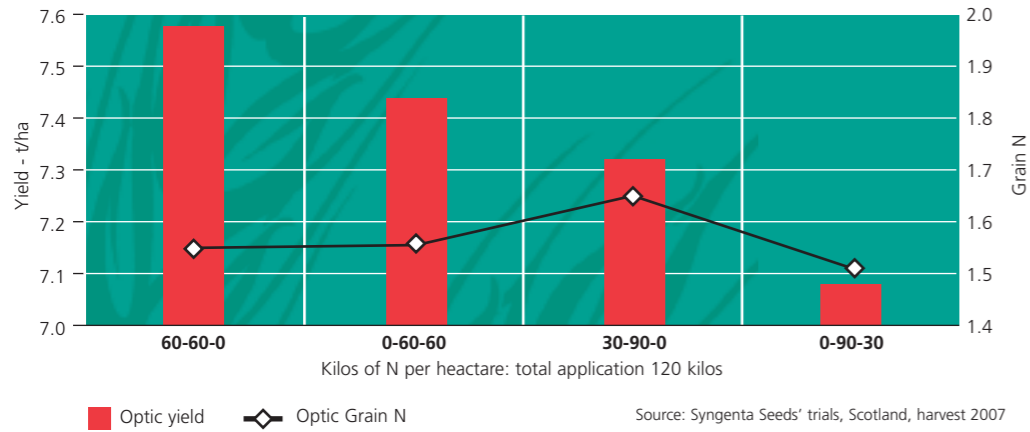
- Altering the timing fertiliser has affected the level of grain N.
- Applications at GS11 (75%) and GS28 (25%) have given the lowest grain N levels, but the best combination of yield and low grain N has been given with 50% in the seedbed plus 50% at GS11.
- Yield and grain size have not been significantly affected by altering timings.
- Missing a seed bed application of fertiliser is only advisable in 'good' establishment situations. If the seed bed is poor or drilling delayed then early fertiliser is crucial to enable good crop establishment.

In most situations in England the recommended amount of N for Optic would be 120-150kg/ha. When grown in Scotland for malt distilling the recommended amount of N would be 110-135kg/ha.

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.



The graph below shows the effect of timing and application rates on Optic's yield and grain nitrogen levels. 1st application made pre-emergence, the 2nd at GS11 and the 3rd at GS28.



PGRs

Syngenta Seeds advises the use on lush crops and very fertile sites. In these cases use low rate Moddus (0.1 – 0.2 lt/ha) at GS29-30 to stabilise tillers and promote root development.

Quality

Renowned for its reliability, Optic is still one of the UK's top selling spring barleys, being purchased in significant quantities in both England and Scotland. It is fully approved by the IBD for brewing and distilling and widely accepted throughout the world as an export variety.

Grain Quality

- Specific Weight: 68.8 kg/hl
- Sieving % through 2.25mm: 2.2%
- Sieving % through 2.5mm: 7.5%
- Nitrogen Content: 1.53%
- TGW: Good

Source: HGCA Recommended List 2009

Harvesting

Top priority - as with all quality crops it is critical to harvest the crop in the best condition as soon as moisture is correct. As with all malting barleys, the variety should be kept separate to prevent contamination and to maintain the maximum premium from the end product.

Storage Management

Correct storage of malting barley is a priority to ensure harvest quality remains. Malting barley should be at a moisture of below 14.5% to minimise the risk of moulds and dried in such a way so there is no damage to the germination.

Grain temperatures and moistures should be regularly checked to ensure quality is maintained and germination levels are kept at 98% plus.

Source: HGCA Recommended List 2009 – the full database can be consulted at www.hgca.com

Disclaimer

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