

LIME X45

cereals

maximise your yields
and crop profitability

LimeX45, produced by
British Sugar, is the ultimate
performer to correct soil
acidity and maintain
target pH for cereals



Take control of your cereals

Follow this step-by-step approach and realise the full profit potential of

Cereals are sensitive to sub-optimal pH

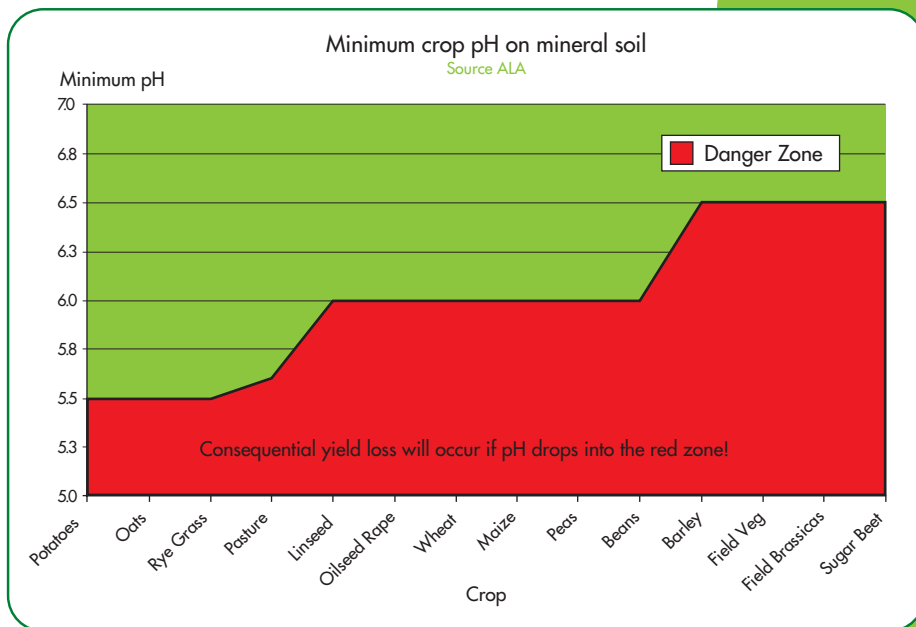
Yield losses can be severe if soil pH status is overlooked. For example, in a long-term liming trial carried out at Rothamsted, yields of Barley were reduced by 2.0t/ha when pH reduced from the target 6.5 to 5.5!

Farmers need to underpin their liming requirement in advance of growing their most acid sensitive crop within the rotation. Typically, sugar beet, barley, oilseed rape and wheat can be susceptible species, as shown in the graph right, but not exclusively!

Once pH drops from the optimal range it will continue to decline into the 'danger zone' where the potential for yield loss can be catastrophic, and the cost to rectify this increases significantly.

Typically, cultivations, leaching and the impact of nitrification can combine to reduce pH, equivalent to using more than 1 tonne of calcium carbonate per hectare per year. Crop use by comparison is minimal.

Therefore, **by using fast-acting maintenance applications of LimeX45, pH can be**



managed in advance for more sensitive crops, with the potential to benefit the remainder of the rotation, until pH testing for subsequent sensitive crops is required again.

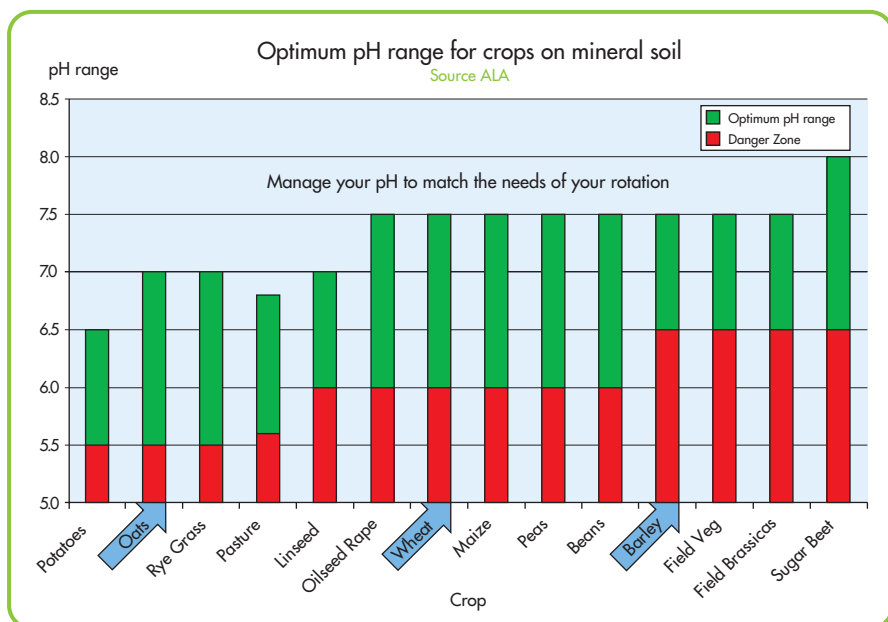
Many growers apply LimeX45 as a maintenance dressing pre-drilling in the autumn or, in the case of light land, in the spring prior to planting; adopting a cultivation strategy to ensure the LimeX45 is well incorporated into the top 20cm to **optimise crop development.**

Unique Product Benefits

- Very fine particle size** – ensures fast-acting & lasting pH correction
- Dry substance level** – minimises dust when spreading
- Nutrient content** – provides useful contribution to soil fertility
- Organic approval** – via the Soil Association
- Storage robustness** – offers on-farm flexibility

Comprehensive Customer Service

- All-year national availability** – flexible for all rotational needs
- Soil sampling & pH mapping** – for accurate determination of liming requirement
- FACTS-qualified staff** – giving you a targeted liming recommendation
- Self-collect or delivered & spread options**
- Flexible payment options**



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al of your land.

LIMEX45

1 pH testing



If you suspect your land is too acidic or simply want reassurance, then the first step is to undertake an accurate field pH map.

Our dedicated LimeX team offers a professional soil sampling and pH mapping service, with optional nutrient testing, across much of the UK. Soil samplers are trained to high standards, offering 'field walked' or 'ATV driven' options.

In addition to creating the data for field assessment, field maps also assist hauliers to locate tipping points and ensure spreading contractors have the specific 'field by field' detail they require for overall or part field treatment.

LimeX45 Application Rates (for 1 pH unit increase)

Soil Type	Arable (20cm depth) Tonnes / hectare (Tonnes / acre)
Sands	12.0 (5.0)
Light	14.0 (6.0)
Medium to Clay	16.0 (6.5)
Organic	20.0 (8.0)

2 Treatment recommendations

FACTS-qualified members of the LimeX team review the results to give an accurate basis for subsequent technical recommendations that take into account any specific crop rotation or other requirements. Precision at this stage provides total confidence in the level of LimeX required and ensures outstanding cost-efficiency.

More detailed information for other rotations is available at www.limex.co.uk.



LimeX45 Particle Size: comparison with common liming products (% passing through sieves)

	5mm	3.35mm	150 micron
LimeX45	99	97	85
Screened Limestone	100	95	20
Mg Ground Limestone	100	95	40
Mg Screened Limestone	100	95	20
Chalk	92	85	66

One tonne of LimeX45 contains a minimum content of:

Total P ₂ O ₅	7kg/t
Total MgO	5kg/t
Total SO ₃	6kg/t

Can be included in fertilizer balance for following crop

See back page for more detail on the value of these nutrients

3 Supply and spreading

A popular approach is our "delivered & spread" package, comprising experienced haulage and spreading contractors providing a professional, timely and cost-effective service.

An alternative option is to take full advantage of the "back-loading" opportunity available from all our sites during the beet campaign. We can arrange it so that a returning haulier brings LimeX45 straight to your farm, so saving you money.

Customers can collect ex-factory if they prefer.



Realising the nutrient value

A unique advantage of LimeX45, and an important one regarding overall farm costs, is the value of the nutrients integral in the product. The information below shows the minimum levels for three important nutrients and their value to your enterprise using RB209 7th Edition (2000) as a guide.

Sulphate (SO₃)

- Minimum of 6.0 kg in every tonne of LimeX45
- At a LimeX45 application rate of 7 tonne/hectare (3t/acre) this equates to 42kg/hectare of SO₃ worth £8.40 (25-40kg SO₃/ha is recommended where deficiency may occur)
- This is a valuable contribution and may reduce the risk of SO₃ deficiency

Phosphate (P₂O₅)

- Minimum of 7.0 kg in every tonne of LimeX45
- At a LimeX45 application rate of 7 tonne/hectare (3t/acre) this equates to 50kg/hectare of P₂O₅ worth £72.50
- This is sufficient maintenance phosphate for cereals at P Index 2

Magnesium (MgO)

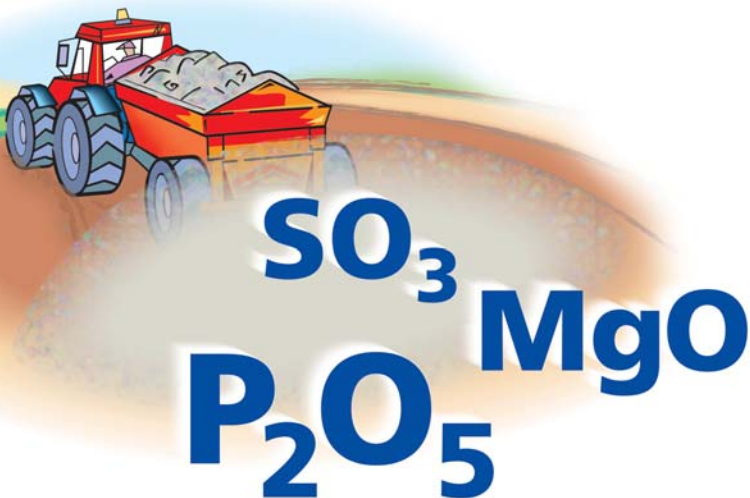
- Minimum of 5.0 kg in every tonne of LimeX45
- At a LimeX45 application rate of 7 tonne/hectare (3t/acre) this equates to 35kg/hectare of MgO worth £9.60
- This will assist cereals at Index 0.

The combined value of these integral nutrients is around

£100.00 per hectare

inclusive of the saving of application of individual nutrients

LIMEX45



pH-nutrient maintenance

To discuss your liming requirement or for technical enquiries, contact our **Helpdesk 0870 240 2314** or visit our website limex.co.uk

Alternatively, e-mail us at limex@britishsugar.com

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